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CONTENTS

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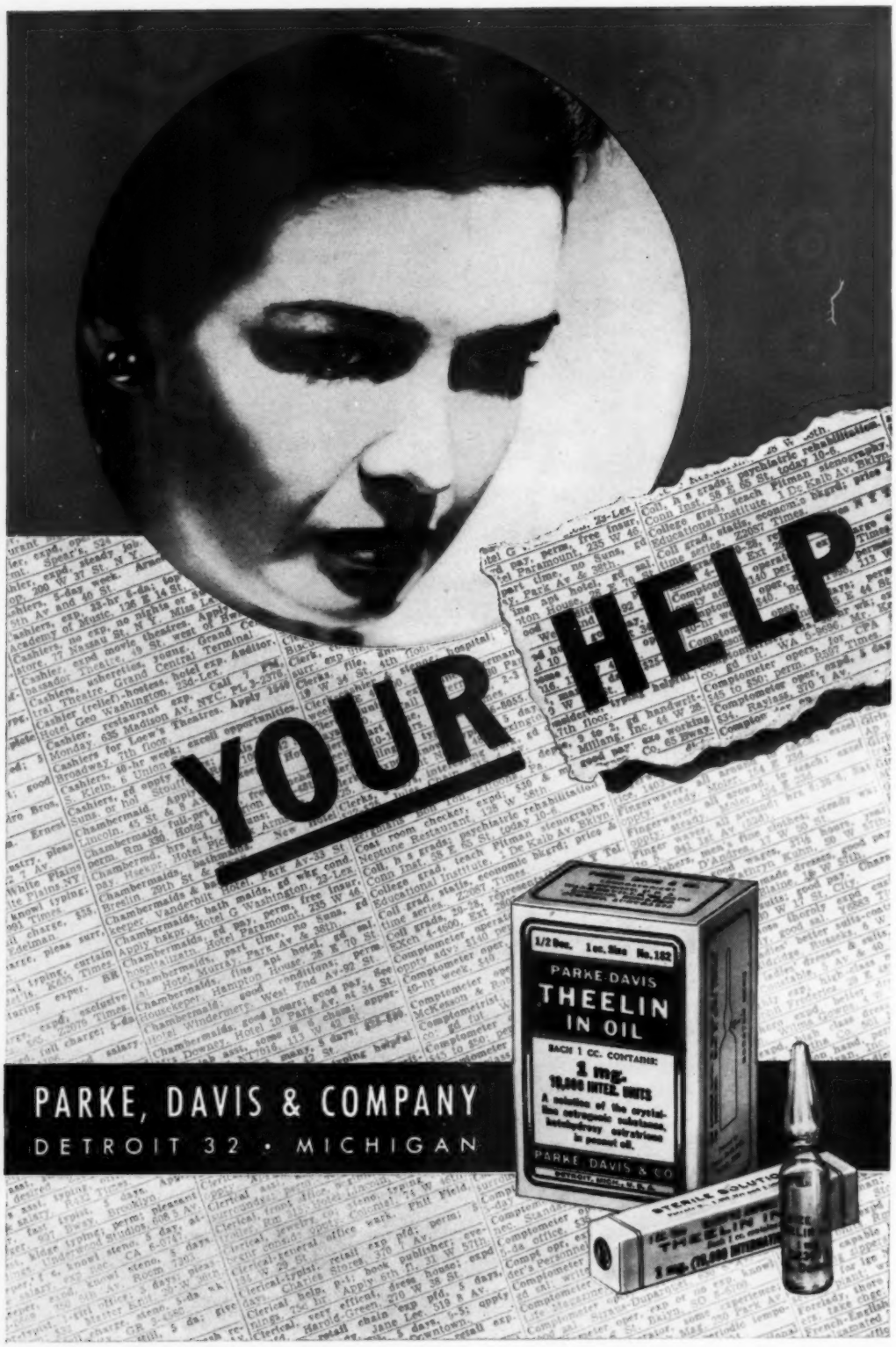
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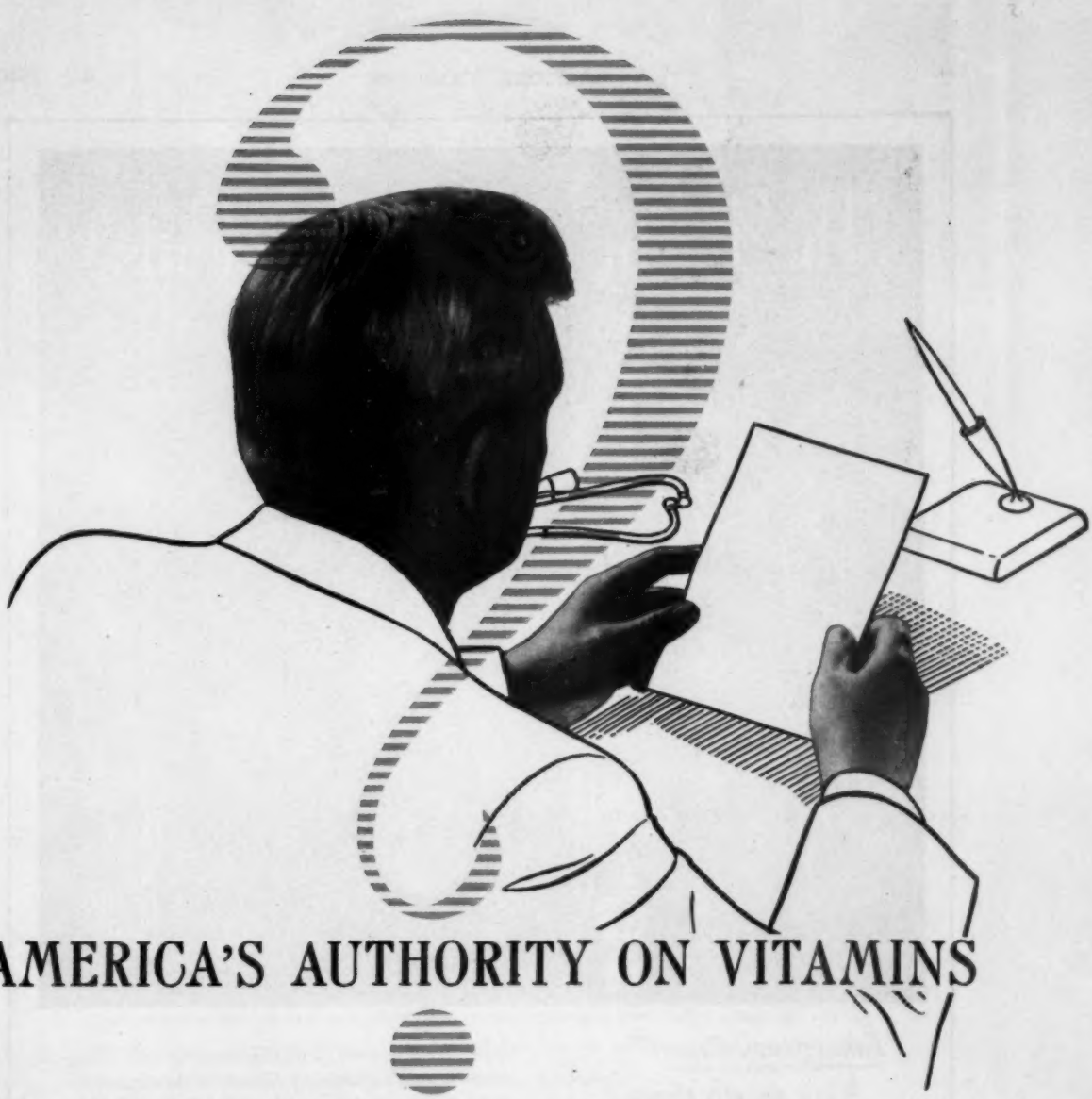

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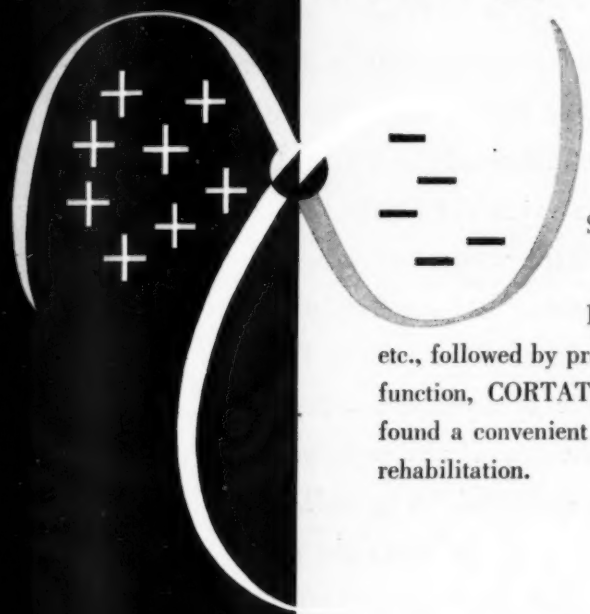

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GEORGE O. BASSETT, M. D.
Prescott, Arizona

I WISH to thank you for this honor and the confidence that you have shown me.

It has been a great pleasure, a privilege and an inspiration to work with so many fine men in this association during the past years, men who have given of their time and their unselfish effort in the interest of medicine. I know that in the years to come this same spirit of cooperation and fraternity will continue.

Before I proceed with the few remarks that I shall make, I would like to pay tribute to those men, members of this organization, who served in the armed forces. At the call of duty they left their families and homes, set aside years of professional attainment, to serve their country. They sustained a great economic loss and on their return were hard put to find a place to open an office. Their services were a magnificent contribution to their country. To them all honor.

For the past ten years or more we have lived in a world of revolution and change. The medical profession in the United States has received the direct impact of this trend, and we know not yet the extent of the change nor how it may affect us in our professional lives. As individuals and as an organization we have fought this trend because we feel that it holds a menace to the standards and progress of our profession.

Our spokesmen in the American Medical Association have admitted the gentle indictment, contained in the opening preamble of the Wagner Bill, with reservations. Our objection has been with the method by which the sponsors of the bill guarantee to bring about this Utopia.

Dr. John H. Fitzgibbon, chairman of the Council on Medical Service and Public Relations, in a statement issued December 6, 1944, lays down this program for the medical profession.

1. The objective of the medical profession of this country is the provision of good medical care to every person in the United States.

2. Adequate trained professional personnel and facilities for providing preventative, diagnostic, and treatment services must be available to all areas.

3. Sound economic arrangements for financing these services and facilities must be set up.

4. Educational efforts will be required to inform the people of the value of good medical care in order to induce them to make intelligent use of the services and facilities made available.

This is a splendid program. In effect it has always been the program and hope of every physician. Yesterday we worked quietly and individually towards this goal; today we become a militant organization with this promise on our standard.

Let us for a moment, with this objective in mind, examine our own sphere of effort, for tomorrow.

Good medical care — This is more nearly true than ever before in the history of American Medicine. Since its organization the American Medical Association has encouraged and promoted a continually higher standard in our medical schools and hospitals. Arizona is fortunate that it has available such a large number of splendidly trained men.

'-to every person in Arizona.' I believe that you will agree that we have slipped up a bit. Phoenix, Tucson, yes. Even Prescott, but to many of the smaller towns we have failed in our obligation. Many of these towns are without any physician; some have what is worse, a physician who has violated and forgotten his professional oath; some are served only by cultists. These towns and communities are not in the jungles of Colombia; they are in Arizona. They are lively towns, often on the railroad or main highway. They need physicians and can support physicians. Why does this condition exist? Briefly, because the younger men of today, most of them seeking specialties, have flocked to the larger cities. Because there is today a dearth of men who are interested in that greatest of all fields, the general practice of medicine. In a sense it is the finest field in medicine, the most interesting. Even for those who wish to specialize, it is an invaluable field to learn and gain confidence. If we accept the wisdom of Sir William Osler, who said: "Every young man who hopes and plans to follow a specialty should engage in general practice for at least ten years," then our young men are missing

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an opportunity, and we as an association have been derelict in our responsibility. Some solution must be found for this problem.

Sound economic arrangements — This association, thru the Committee on Medical Economics, has accepted this challenge, and will present to the House of Delegates the plan based on this need. In a state sparsely settled this has been a difficult problem.

Educational efforts — Here again we have made a beginning. The Committee on Public Health Education with the limited funds that were available has done a splendid job. The program for the coming years should be carefully studied.

I would like to suggest one or two other matters that are purely a State problem, yet are vitally important if we as an organization are to do our job.

The Medical Practice Act of the State of Arizona is obsolete in many respects. It should be revised if for no other reason that we might have a medical examining board that is complete

Our Public Health Laws need revision.

The provisions for the hospitalization and care of pulmonary diseases should be adequately increased.

As a profession, we have not only our responsibility as citizens, but by our oath have dedicated our lives to that profession that has for its objective the alleviation of pain and the conquering of disease. We have accomplished much in a relatively short time.

Whatever pattern the practice of medicine may take tomorrow, it is imperative that we carefully safeguard the ideals and maintain our standards of our profession.

A CLASSIFICATION OF THE DIFFERENT TYPES OF DIABETES MELLITUS WITH A DISCUSSION OF THE DIAGNOSIS AND TREATMENT OF EACH

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JAMES A. GREENE, M. D., *Professor of Medicine*

Houston, Texas

THE general principles of diet, insulin and education of the patient are generally accepted in the treatment of diabetes mellitus and only the details of their application are of controversial nature. Any discussion of the treatment of diabetes mellitus, however, should take into consideration the different types of diabetes with which we are now familiar. Classification of diabetes mellitus into the different types facilitates consideration of the etiologic factors, the pathologic physiology and the preferable treatment of each type. The present discussion concerns itself with a classification of diabetes mellitus and with the diagnosis and treatment of the different types.

CLASSIFICATION

One classification is shown in Table 1. The regular or usual type consists of those patients with diabetes mellitus of unknown etiology, which are considered by most authors to have a decrease in the production of insulin by the pancreas. In the unstable variety the blood sugar will rise above the renal threshold without relation to the ingestion of food and the hyperglycemia and glycosuria occur nearly as frequently during the night as during the day. This variety is usually observed in young persons and, therefore, the term juvenile variety has been attached to it. In the stable variety the hyperglycemia and glycosuria occur in relation to the ingestion of food, and do not appear at night, if the diabetes is controlled during the day. This variety is more common in the adult and, therefore, the term adult variety has been attached to it.

The arteriosclerotic type of diabetes mellitus occurs in older individuals who have arteriosclerosis. It is mild and the patients never develop acidosis, nor is the glycosuria excessive. The diabetes developes late life after arteriosclerosis has become well developed. The complications occurring in these patients are due to inadequate circulation of blood to the myocardium, cerebrum, kidneys or lower extremities.

The obesity type was pointed out by Newburgh and Conn[1], and the individual has hyperglycemia and glycosuria, but does not de-

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velop acidosis. The hyperglycemia and glycosuria disappear when the body weight of the patient is brought to within normal limits.

The endocrine type includes those persons with diabetes mellitus secondary to tumors of the pituitary or adrenal glands.

The fifth type includes those patients with diabetes mellitus in which demonstrable lesions of the pancreatic parenchma are present. These cases probably should be considered under the first type, but they are listed as a separate group to emphasize that disease of the pancreas should be considered in every case of diabetes mellitus. In some cases recurring attacks of pancreatitis may be the causative agent or tumors of the pancreas have been encountered.

The sixth type includes those cases of diabetes mellitus in which hepatic disease is present. This type may or may not be different from the first type, except for the addition of the liver disease, but the therapy differs in the two groups.

DIAGNOSIS

The diagnosis of the first type is made by establishing the presence of diabetes mellitus and by exclusion of other types. This may require some time and careful study.

The diagnosis of the arteriosclerotic type is made in an older person with a mild diabetes mellitus and with arteriosclerosis. We should not forget that an older person may develop the usual type of diabetes and acidosis may occur. If there is a history of acidosis or it is present, arteriosclerotic diabetes is excluded, regardless of the age and amount of arteriosclerosis.

The obesity type is suspected in all obese patients with diabetes mellitus. The diagnosis is established only if the diabetes disappears after the body weight of the patient is brought to within normal limits. The incidence of the obesity type is fairly common. Newburgh[2] found approximately 35 per cent of the cases of diabetes coming into the University Hospital at Ann Arbor to be of this type. In Iowa and in Texas I have not found the incidence to be that great.

The diagnosis of the fourth type, those with diabetes mellitus secondary to tumors of the pituitary or adrenal glands is made by the presence of other manifestations of such tumors and the diagnosis is definitely established if the diabetes subsides following removal of the tumor or recession of the tumor following roentgenotherapy.

The fifth type is diagnosed only in those cases with demonstrable lesions of the pancreatic parenchyma. A history of chronic biliary tract disease, or of large, bulky and foul stools, or attacks of pain in the epigastrium, radiating through to the back in the upper lumbar and lower thoracic regions are sufficient indications for further studies of possible pancreatic deficiencies. A palpable mass in the region of the head of the pancreas, which is usually very questionable or an enlarged liver or the presence of large, bulky and foul, fatty stools are additional indications for further study. Studies of the pancreatic enzymes in the stools and in aspirations from the duodenum through duodenal tubes may be of help. If the enzymes are reduced, a diagnosis of probable pancreatic deficiency can be made. I have not had sufficient experience with blood amylase estimations in chronic cases to justify an opinion of their value.

The diagnosis of the sixth type or those patients with both diabetes mellitus and hepatic disease is made only when there are other manifestations of hepatic disease in a person with diabetes mellitus. Early and mild cases of hepatic disease are undoubtedly overlooked.

TREATMENT

The treatment of the diabetes will depend, to a certain extent, upon the type of diabetes present. In the regular or usual type dietary therapy is generally accepted. The composition of the diet, however, is still controversial. In the more severe cases insulin therapy is generally accepted, but the types of and doses of insulin are still the subjects of arguments. In the unstable or juvenile variety of case injections of insulin are required more frequently or insulin preparations which are absorbed more slowly are employed. In the stable variety less controversy has arisen in regards to the insulin to be prescribed, but the opinion is not unanimous. Education of the patient regarding his or her diabetes is generally recognized and agreed upon and the best results are obtained in clinics and in practices with good educational programs for the patients. A discussion of these different controversial subjects is not the purpose of this presentation.

The treatment of the arteriosclerotic type of diabetes mellitus has been, in the past, the same

as that employed for the stable regular variety. In more recent years, however, patients have been observed with arteriosclerotic heart disease and diabetes mellitus who received the usual therapy for their diabetes mellitus and the cardiac condition, either did not improve or became worse and did improve when the diabetes became slightly or moderately out of control. The idea has become prevalent that patients with arteriosclerotic heart disease and diabetes mellitus should receive more carbohydrate in their diet and that the blood sugar level should be permitted to remain at a higher level than in the average case. It has been my practice for several years to control the diabetes in the usual fashion in these cases and as soon as the urine has become free of sugar to increase the diet by 50 to 100 grams of carbohydrate. In rare instances it will be necessary to add or to increase the dose of insulin. The urine is permitted to show a trace of sugar in the mid-morning specimens, but is kept free of sugar for the remainder of the 24 hours. The blood sugar rises to slightly above the renal threshold during the mid-morning, but remains below for the rest of the time. In such cases the renal threshold is elevated frequently and the blood sugar level will be proportionately higher than in cases with normal renal thresholds. All cases of arteriosclerosis and diabetes mellitus have been managed in this fashion regardless of whether or not the arteriosclerosis involves the arteries of the cerebrum, heart, kidneys or extremities or all of them. I think that it is just as important to maintain this regimen in patients with cerebhal or peripherial arteriosclerosis as it is in patients with arteriosclerotic heart disease.

The patient with the obesity type of diabetes should receive a diet sufficiently inadequate in calories to cause the body weight to decrease on the average of approximately 2 pounds weekly until it has reached normal limits. I have usually prescribed diets of one gram of protein, and from 1½ to 2 grams of carbohydrate for each kilogram of ideal body weight and fat in amounts sufficient to make up the calories to 1000 per day. The urine usually becomes free of sugar, but if the insulin is required it is employed in the necessary doses. As the diabetes improves the insulin is reduced and eliminated and after the body weight reaches normal limits the diet is increased gradually until glycosuria appears or until a high carbohydratt intake is obtained. If the patient is able to utilize 400 or more grams of carbohydrate per day the diabetes is considered to have disappeared and the patient is instructed to eat a general diet, but ot keep the body weight within normal limits.

The treatment of the diabetes in cases of the first type except as modified by pancreatic lesion. A tumor should be removed if possible. If the external pancreatic enzymes are reduced or absent they should be supplemented and the possibility of the developement of a fatty liver should be borne in mind. The enzymes can be replaced fairly satisfactorily by the oral administration of dried pancreas or other preparations of pancreatic enzymes. The developement of a fatty liver can be prevented by the administration of lipocaic, choline, betaine hydrochloride and possibly by methionine. A higher protein content of the diet may be preferable.

The treatment of the sixth type or those with concomitant diabetes mellitus and hepatic disease are treated in the same manner as the first type except for the modifications required by the hepatic disease. As a rule the carbohydrate intake is increased, as is the protein, but the fat content of the diet is reduced greatly. Betaine hydrochloride, or choline, or methionine may be administered. I have preferred in some cases to permit the blood sugar to remain above normal and from a slight to a moderate amount of glycosuria to be present. The insulin dosage. if required, is adjusted accordingly.

SUMMARY

Cases of diabetes mellitus have been classified into six different types.

The practical considerations of the differentiation, diagnosis and treatment of the various types have been discussed and outlined.

Table 1

1. Regular or Usual Type:
   - A. Unstable or Juvenile Variety
   - B. Stable or Adult Variety
2. Arteriosclerotic Type:
   - A. Cerebral Arteriosclerosis
   - B. Coronary Arteriosclerosis
   - C. Renal Arteriosclerosis
   - D. Peripheral Arteriosclerosis
   - E. Generalized Arteriosclerosis
3. Obesity Type:
4. Endocrine Type:
   - A. Pituitary Variety
   - B. Adrenal Variety

5. Parenchymal Pancreatic Disease
6. P!arenchymal Hepatic Disease

A classification is given of the different types of Diabetes Mellitus.

BIBLIOGRAPHY

1. Newburgh, L. H., and Conn, J. W.: A new interpretation of Hyperglycemia in obese middle aged persons. Jr Amer. Med. Association 112, 7, 1939.
2. Newburgh, L. H.: Control of the Hyperglycemia of Obese "Diabetes" by weight reduction. Ann. Int. Med. 17, 935-942 December 1942.

SICKLE CELL ANAEMIA

IAN P. STEVENSON

St. Joseph's Hospital, Phoenix, Arizona

THE sickle cell trait has been estimated to be present in from 7-13% of North American Negroes. While only a small proportion of these with the sickling trait actually suffer from sickle cell anaemia, this disease must be considered in the differential diagnosis of many disorders affecting the negro race. Because this condition is so frequently confused with completely different diseases it is important to cultivate a greater awareness of its existence, particularly in areas where there is a large negro population.

Case Report

The patient was a six year old negro girl whose past history contained nothing unusual apart from a number of episodes resembling the one which brought her to the hospital, although these were milder in severity.

This attack began one evening with nausea, vomiting and severe abdominal pain which was localized around the umbilicus. The child was seen by a doctor who administered a narcotic and told the parents to bring the child to the hospital the following day if she was not better. This they did and when seen the following morning the child still had severe abdominal pain which at this time was localized in the right lower quadrant. The white cell count in the blood was 27,400 and the differential showed a shift to the left. The diagnosis of appendicitis was strongly considered - and reasonably so.

There were, however, several points out of harmony with the usual picture of appendicitis. The pain although severe was not accompanied by a proportionate tenderness and in fact at times there seemed to be no tenderness in the abdomen at all - even on deep palpation. The site of the pain also seemed to shift from place to place. Further, although the rectal temperature was slightly elevated to 100.4°, the pulse was disproportionately rapid, being 108. The hemoglobin was found to be only 52% with a red cell count of 2,550,000. When a slight icteric tinge was noted in the sclerae it became obvious that the child was undergoing a haemolytic crisis of some sort. In view of the patient's race a special search was made for sickle cells in the blood smear and numerous sickled forms were found. Later these were demonstrated even more conclusively in a wet preparation.

Further laboratory tests tended to confirm the diagnosis. The icterus index was 40.5. The cell fragility was decreased as is usual in these cases; initial haemolysis occurred in a saline solution of 0.34% and complete haemolysis in one of 0.23%. There was a slight reticulocytosis (3.8%). The prothrombin time was normal. The urine showed no bilirubin or excess urobilin. The child's father was found to have the sickling trait although he had never had any symtoms of sickle cell anaemia: the patient's sister did not show this trait.

The patient was treated with two transfusions of 500 c.c. of whole blood and her haemoglobin at the time of discharge was 81%. Her symptoms improved considerably and within a few days her abdominal pain disappeared completely. For several days after this she suffered from transient excruciating headaches which came and went very suddenly, but which, while they lasted, produced apparently agonizing pain so that the child would cry miserably. They had usually disappeared before any therapeutic relief could be offered.

The duration of the disease in this child cannot be stated with any certainty although it is likely that her previous attacks of abdominal pain had a similar explanation. On the other hand the disease had not progressed to the point where there were any bone changes as the x-ray pictures of her fore-arm were entirely normal. The prognosis in this case is similarly difficult to determine. It must, however, be guarded as it is known that in this disease, as in rheumatic fever, the outlook depends upon the age of onset as well as upon the frequency of attacks. Where the first attack is delayed until young adulthood the outlook is much better. Some patients eventually outgrow the attacks although the sickling trait remains. Others become gradually weaker with succeeding attacks and death is not infrequent.

The pathogenesis of symptoms in this condition is still somewhat obscure, but the following account is the most probable explanation.

The symptoms are usually found in crises which occur cyclically. As the cells become older they have a greater tendency to become sickled. All cells show a sickling tendency but young cells may only sickle under markedly reduced oxygen tension. The older the cell the more easily it will sickle under higher oxygen tensions. A certain point is reached when numbers of cells are senile enough to sickle at the arterial ends of the capillaries. Sickled cells are more rigid and less adaptable to changes in vascular shape and calibre. As a result they are apt to be caught in narrow capillaries and 'cell jams' occur. There is a tendency for this obstruction to spread back to the arterioles and smaller arteries with resultant thrombosis and infarction. This tendency is promoted by the release of coagulating substances into the blood stream during the course of the destruction of the red cells which are jammed. The resultant increase in blood coagulability may be responsible for the sudden initiation of a crisis with widespread thromboses. The destruction of the clotted red cells is conducted by the reticulo-endothelial system. It is not an intravascular haemolysis as haemoglobinaemia is never demonstrated in these patients. During this phagocytosis the jammed sickle cells are removed from the circulation and the blood becomes rejuvenated by the production of younger cells. The latter do not have as low a threshold to sickling as their predecessors and another crisis does not occur until they have aged. There is, however, a certain minimal amount of constant red cellular destruction going on even in quiescent stages as indicated by persistent hyperbilirubinaemia.

During one of these crises large numbers of red cells may be rapidly eliminated from the circulation and the ensuing symptoms are those of the 'haemolytic crisis' first described by Widal many years ago. The reduced cell volume results in reduced delivery of oxygen which in turn promotes tissue anoxia. The reduced blood oxygen tension further increases the tendency to sickling. In addition metabolic products of deficient oxidation lead to capillary atony and a shock-like state in which further stasis and thrombosis may occur. Tomlinson has ably drawn attention to the shock-like state produced in sickle cell anaemia and described this vicious circle which may lead to death.

More specifically this generalized anoxaemia may manifest itself in such symptoms as weakness, prostration, leukocytosis, tachycardia and circulatory collapse. The severity of the symptoms naturally depends upon the extent of cellular destruction.

In addition to these general manifestations of anaemia there may be signs of localized anoxaemia secondary to the arterial thromboses Almost any organ of the body may be thus involved and infarcted. The principal symptom of this process is usually severe pain. Such pains are commonly felt in the abdomen and the extremities. It is probable that the headaches felt by our patient were due to numbers of such small thromboses. It is these multifarious pains which make the differential diagnosis of the condition exceedingly subtle. The disease has naturally and excusably been mistaken for a great variety of intra-abdominal emergencies, for rheumatism, meningitis, various blood dyscrasias, and numerous other disorders both common and obscure.

An accurate diagnosis is particularly important not only because unnecessary operation is very dangerous in the middle of a haemolytic crisis, but also because these patients are often victims of the other conditions with which the disease is so easily confused such as appendicitis and in these situations operation may be just as lifesaving as it would be dangerous in the presence of a crisis.

Errors may be avoided quite easily if the usual care is taken in eliciting the history and making the physical examination. The condition should always be kept in mind in the examination of a negro patient. The combination of nausea, vomiting, abdominal pain, fever and leukocytosis is naturally tempting to the conscientious surgeon, but if unusual anaemia or tachycardia is present suspicion should be aroused, all the more so if the pain seems to shift and if there is little or no tenderness in the presence of much pain. In such cases icterus in the sclerae should always be sought and even if not found a blood smear should be carefully studied. If the symptoms are due to sickle cell anaemia there will usually be enough sickled forms present in the ordinary blood smear to confirm the clinical impression. If special preparations are required it is probable that the patient has the sickling trait, but not sickle cell anaemia. This distinction is very important as the former is much commoner than the latter and the mere presence of sickling

should not be considered as establishing a diagnosis. In doubtful cases special techniques should be employed to demonstrate sickle cells. Scriver and Waugh collect blood which has been made stagnant in the finger tip; Tomlinson exposes the blood to carbon dioxide to bring out the sickling. Often a simple air-tight wet suspension of cells will, after sufficient oxygen has been consumed, show the sickling as well as any other preparation and this is by far the easiest method to use.

Winsor and Burch have recommended a special test which depends upon the fact that the sickled cells have a much slower sedimentation rate than unsickled cells. They collect stagnant blood some of which they set up for a sedimentation rate immediately. The remainder of the blood is then thoroughly aerated and a sedimentation rate is determined on it. If the difference between the rates of the unaerated and the aerated specimens is greater than 20 mm. per hour the patient has sickle cell anaemia in 98% of cases. They have used this method as a screening test for negro patients on whom it is done as routinely as the Wassermann test. By means of it, numerous unsuspected cases of sickle cell anaemia have been uncovered and faulty diagnoses with their attendant therapeutic errors avoided. It is doubtful however, if this test is applicable to small hospitals and fortunately it is not necessary as most errors and certainly all catastrophic mistakes can be avoided by the clinician who bears in mind the preceding suggestions.

The therapy of this condition is very unsatisfactory and centres around blood transfusions which are given at the time of crises to combat the anaemia. It might be thought that anything which would reduce the tendency of the cells to sickle and of the sickled cells to coagulate would prevent or mitigate the crises. Actually only the latter is even theoretically possible as in those predisposed, eventually enough of the cells would become old enough to sickle and cause jamming. In this connection attempts have been made to give anticoagulants such as dicumarol at the onset of a crisis, but without benefit. Likewise oxygen has been administered in the hope of decreasing the sickling tendency and perhaps allowing the cellular jamming and destruction to take place more gradually instead of critically. This also has been ineffective. Probably no further advances in therapy will be made until we can discover the factors responsible for the production of a red cell with a tendency to sickle. Given such a cell attempts to alter its habits can be at best merely palliative and only delay the inevitable change in form.

REFERENCES

Murphy, Robert C. and Shepard Shapiro. The Pathology of Sickle Cell Disease. Ann. Int. Med. 23: 376, September, 1945.

Scriver, J. B. and T. R. Waugh. Canad. Med. Assn. Journ. 23: 375. 1930.

Tomlinson, Wray J. Abdominal Crises in Sickle Cell Anaemia. A Clinico-Pathologic Study of 11 Cases With a Suggested Explanation of their Cause. Am. J. Med. Sci. 209: 722, June. 1945.

Winsor, T. and G. E. Burch. Diagnostic Physicochemical Blood Tests in Sickle Cell Anaemia. Am. Jour. Med. Sci. 207: 152. Feb., 1944.

Winsor, T. and G. E. Burch. Sickle Cell Anaemia. "A Great Masquerader." J. A. M. A. 129:793. Nov. 17, 1945.

The author wishes to express his thanks to Dr. Dudley Fournier for permission to publish this case and to Dr. O. O. Williams, Department of Pathology, St. Joseph's Hospital, for his helpful suggestions.

A CASE OF CHRONIC REGIONAL ILEITIS

GEO. G. McKHANN, M. D., ELTON R. CHARVOZ, M. D. JAMES M. OVENS, M. D.
W. W. WATKINS, M. D. MAURICE ROSENTHAL, M. D.

Phoenix, Arizona

HISTORY AND CLINICAL FINDINGS

Geo. G. McKhann, M. D. Elton R. Charvoz, M. D.

D. B., a girl, age 16, was first seen at her home about 7 P. M. March 31, 1945. That afternoon she had come to the office, but tired of waiting, returned home with a temperature of 103 on arrival.

Present Illness: The illness began March 17th, 1945 with diarrhea, four or five stools daily with mucus and streaks of fresh blood, accompanied by high fever. This lasted ten days, after which she had cramps across the upper abdomen, and became constipated. She has spells of nausea, gets a "bitter taste in mouth", and feels as if she would get relief from vomiting, but does not vomit. Recently she has had some discomfort in the upper abdomen, the epigastrium, and the lower abdomen. The lower abdominal distress is crampy and comes on especially in the evening and at night. She has some discomfort on voiding, but no actual pain, nor burning. She has no joint pains.

Past History: Scarlet Fever 19 months ago, followed by Rheumatic Fever, of which she was ill three weeks in a hospital and four months at home. During this time she also had a urinary infection. During the time she was ill with Rheumatic Fever she says that she had no joint pains because the doctor got it early enough. Strep Throat one year ago followed by tonsillectomy. Rather severe bruise of the lower abdomen about one year ago when thrown against the handle-bar of her bicycle when she collided with a parked car. She has lived in Arizona since February 1944, previously resided in Washington and Nebraska. Always nervous and has a hacky cough when especially nervous. She has had diarrhea off and on ever since February 1944. The diarrhea lasted for two or three days out of every two weeks on the average. Her mother did not want her to attend school last year because she did not seem very well. She did attend school altho at times she would feel so weak that she had to bend forward to keep from fainting. (One wonders if the present illness does not date back to the series of illnesses following Scarlet Fever.) Menstruation began in January 1945, quite normally. None since.

Family History: Father, age 40, living and well. Mother, about 40, has Arthritis and Pernicious Anemia. One brother, age 19, well, recently discharged from the Marines. He had Malaria while in the service. Maternal grandmother had Pulmonary Tuberculosis.

Physical Examination: A well-nourished, pale girl. Temperature 99.2, pulse 80, respiration 20. Tongue had a white coat. Head, neck and chest showed no abnormal physical signs. The abdomen was soft, no masses were felt, but there was slight tenderness on deep pressure over the lower abdomen and around the umbilicus. Some type of intestinal or urinary infection was suspected. Soft diet, poly-vitamines, and sulphadiazine gr. 7.7 every 6 hours were prescribed until laboratory studies could be made.

Course: For the next few days her temperature varied from normal to 101. On April 2nd she came to the office with temperature 100, pulse 90, respirations 20. She was coughing some and complained of headache over the top and front of the head. One faint sibilant rale was heard in the left interscapular area. Fluoroscopic examination of the chest showed normal heart, lungs and great vessels.

Laboratory reports are shown in tables 1 and 2. The agglutinations included typhoid, para-typhoid, Brucella and Proteus OX19, which were all negative. On April 7th stool examination and cultures were negative except for a four plus occult blood. The Cutler Blood

Table 1. LABORATORY REPORTS ON FIRST ADMISSION April 1945

Date	April 2 Office	April 5 Home	April 9 Hospital	April 10 Hospital	April 11 Hospital	April 13 Hospital	April 25 Hospital	May 15 Home
Hb	82% ?		68%					70.6%
RBC	3050000							3840000
WBC	11,400	19,500	12,200	12,150	10,300	8,400	11,900	17,300
Polynuclears		85%	61%	83%	84%	64%	70%	87%
Basophils						1		
Eosinophils		1	1			2	1	1
Juvenile		5	1	1				
Stab		20	10	10	7	7	8	15
Segmented		59	49	72	77	54	61	71
Lymphocytes		13	35	16	14	33	25	11
Monocytes		2	4	1	2	3	5	2
Malaria, or Parasites					none			none
Blood culture					no growth			
Sed. Rate	16mm		26mm				26mm	25mm
Temperature	100		99.4	104.4	99.8	99.2	98	
Pulse	90		96	126	100	80	80	
Respiration	20		20	28	24	20	22	
Coccidiodin	neg.							
Tbc Patch Test						neg.		
Brucellergen						neg.		
Kahn					neg.			
Agglutinations		all neg.		Brucella	neg.			
Urine	neg.		neg.		Culture B. Subtilis on 4/17			
Stool	occult blood, no ova, parasites nor pathogens							
Urethral smear					Gram pos. and neg. rods			
Ekg	within normal limits on May 1, 1945							
Blood sulpha						7.5 mg		

X-rays are reported elsewhere

Sedimentation Test was used. Table 3 shows the pre-operative Penicillin and Sulpha therapy.

On April 7th she was seen at home sitting up in bed, quite pale, temperature 99.4, pulse 80. There was faint jaundice of the sclera. The abdomen was soft, but the cecum was palpable and quite tender on deep pressure. There was no rigidity and no rebound tenderness. The possibility of a chronic appendicitis, or appendiceal abscess was considered, and she was hospitalized.

On April 8th Dr. Elton R. Charvoz and Dr. McKhann noted a waxy pallor of the skin, a thick, white coat on the tongue, heart tones quite loud with some roughening over the tricuspid area with a possibly shortened first sound, a single sibilant rale in the left interscapular area, liver area tender on deep pressure, as was the suprapubic area, no masses and no rigidity, blood pressure 108/60, continued moderate fever and pulse of 100. The sulphadiazine was increased to gr. 7.7 every 4 hours.

On April 9th the gastro-intestinal X-ray examination showed an appendix visualized and not tender. Barium enema showed no evidence of inflammatory disease of the colon. Other findings are discussed later.

On April 10th when fever went to 104.4 she had no pain, but seemed excited and laughing. A profuse sweat followed. No new physical signs followed this episode. On April 16th sulphadiazine was discontinued, and Penicillin 10,000 units intra-muscularly every four hours was ordered. This was increased to 15,000 units on April 22nd. On April 22nd and 24th she had severe cramps in the lower abdomen during mid-day and in the early evening.

After April 23rd and 400,000 units of Penicillin the temperature ranged from 97 to 99, and the pulse from 80 to 90. On April 30th she was discharged after a total of 940,000 units of Penicillin. Rectal examination before discharge showed a tender nodule, like a gland, palpable high in the right posterior pelvis. This area was extremely tender. Because of the history of Rheumatic Fever an electrocardiogram was taken. It was normal.

After leaving the hospital her condition remained good for several days, but by May 7th her temperature began a slow rise. Aspirin afforded no relief. On May 14th the temperature was 102, pulse 140, face flushed, tongue heavily coated with white, first heart sounds rather short and quick, abdomen soft, cecum palpable and gurgled with gas and fluid, very definite sensitiveness of the lower abdomen. Small, pea-sized inguinal glands, bilateral, and proximo-distal curvature of the finger nails were noted. That night she had severe cramps and pain in the abdomen, and vomited bile stained fluid. She also had discomfort when her bladder was full and on voiding. She passed two yellow, liquid stools.

Table 2. LABORATORY REPORTS ON SECOND ADMISSION May 1945

Date	May 16	May 22	May 25	May 28	May 30	June 11	June 16
Hb	71%		71%			70%	60%
RBC	4250000		3640000		3270000	4150000	3040000
WBC	8.000	11,850	12,000	16.050	14,450	10,600	8,200
Polynuclears	69%	80%	82%	64%	83%	61%	75%
Basophils							
Eosinophils	1	3	7	3	2		
Juvenile				1	1		
Stab	5	8	1	6	13	3	2
Segmented	63	69	74	54	66	58	73
Lymphocytes	28	17	17	30	16	32	22
Monocytes	3	3	1	6	1	3	3
P'atelets					277,950		
Sed. Rate		26mm					
Temperature	100.4	99.6	102	99.4	100.6	99.4	98.6
Pulse	110	130	130	100	130	120	88
Respiration	24	28	32	18	20	24	20
Urine	neg.	neg.	neg.	ft tr albumin		neg.	neg.
		RBC — menstruating — RBC					
Stool	Smear and culture negative on 5/16, 6/2,3.						
Agglutinations	All negative on 5/15.						
Blood sulpha							9mg on 6/14.
Throat			Pharyngitis 5/25 to 6/10.				
Smear			Pure Staphylococcus aureus.				
Culture			Pure Staphylococcus aureus, slightly hemolytic. No fungus on culture.				

Operation and transfusion June 11, 1945.
Discharged from hospital June 23, 1945.

On the 15th of May she was re-admitted to the hospital. Agglutinations were again all negative. Enteric coated sulphathiazole gr. 5 was ordered every four hours. Pain in the epigastrium and in the suprapubic area continued with no rigidity. The tender, sensitive area in the right pelvis was still present. The uterus and adnexa seemed normal on rectal examination.

Dr. James M. Ovens saw her on May 22nd. He noted a soft abdomen except suprapubically, and quite tender there. Rectal showed a nodular cul-de-sac lesion, painful to touch. She appeared more anemic than count indicated. The second menstrual period had appeared a few days previously and persisted for twelve days. Dr. Ovens advised laparotomy, which was planned, but postponed because of another chill and high fever, accompanied by pain in the right sacro-iliac area and down the right leg to the foot. She got some relief from pressure on the foot and massage. X-ray of the lower spine and sacrum showed only spina bifida of the first sacral segment. A flat plate of the abdomen showed no abnormal shadow.

On May 26th she developed an acute pharyngitis. The enteric coated sulphathiazole was discontinued, and sulphadiazine gr. 7.7 dissolved on the tongue every four hours was ordered. By May 30th the pharyngitis had become worse with a heavy pseudo-membrane, more like mucus, adherent and dirty gray, covering the posterior pharyngeal wall. When removed it left a red, granular, inflamed pharynx with pin-point, white spots. Smear and culture showed a pure staphylococcus aureus, slightly hemolytic. This developed in spite of both sulpha and penicillin therapy. Operation had been planned for the 4th of June, but was again postponed. Dr. B. L. Melton was called to treat the throat condition. He found her sinuses clear except for a little ethmoid drainage. The sulphadiazine and penicillin were omitted for one day only. By June 11th her throat had improved, and her general condition was enough improved to permit operation.

Table 3.
PRE-OPERATIVE PENICILLIN AND SULPHA THERAPY

	Penicillin	Sulphadiazine	Sulphathiazole (Enteric coated)
Home			
Days		8	
Dosage		16Gm	
Hospital			
Days	12	16	
Dosage	940.000	36Gm	
Hospital			
Days	21	11	11
Dosage	1,800,000	30.5Gm	17.6Gm
Total			
Days	33	35	11
Dosage	2,740,000	82.5Gm	17.6Gm

DISCUSSION OF X-RAY FINDINGS

Dr. W. W. Watkins

Regional enteritis is recognized on roentgen examination by narrowing of the intestinal lumen, usually irregular in caliber with absence of the mucosal folds and with a palpable tender mass corresponding to the abnormal shadow. The shadow of the involved area may be only 2 or 3 mm. wide. This marked narrowing in most cases is due in large part to spasm.

The narrowing may become sufficiently rigid so that a fibrous constriction is produced. This may cause mechanical ileus." (Quotation from Golden's recent book on "Radiologic Examination of the Small Intestine.")

This condition was originally called "terminal ileitis" on the misconception that it involved only the terminal ileum. While the terminal one or two feet of the ileum is the most frequent location of this lesion, other parts of the small bowel can be involved and there may be multiple areas of regional enteritis.

The most certain way of finding the lesion is to suspect it before x-ray examination is made and then inform the radiologist of this suspicion,- else he is very likely to overlook the condition. The reason for this is that the examination required is a special one and not part of the routine barium meal gastro-intestinal procedure. Such a special examination would not be done unless requested or unless a suspicion of regional ileitis is stated to be present.

The narrowing of the terminal ileum as shown in the six hour film (see figure 1) is the typical appearance but a very similar contraction might be present as the result of temporary spasm of the ileum from hypertonicity without infection. Therefore, the condition must first be suspected on clinical evidence, and fluoroscopic and roentgenographic examinations carried out at frequent intervals during the progress of the barium through the small bowel. In this way, the evidence of permanent contraction of the segment of ileum can be detected and palpated under fluoroscopic guidance.

Fig. 1—Six hour barium meal film showing contracted terminal ileum of regional ileitis. (Arrow points to lesion.)

SURGICAL DISCUSSION

Dr. James M. Ovens

Dr. McKhann has given a very complete discussion of the history and physical findings in the case of this young girl. Surgery was decided upon, and on June 11, 1945, she was operated upon with a diagnosis of an inflammatory mass in the right side of the pelvis, nature to be determined.

Operation was carried out as follows:

The abdomen was opened by means of a right para-rectus incision. The hand was inserted, and the liver, stomach, duodenum, kidneys, spleen and pancreas explored. The hand was then inserted into the pelvis, where a firm nodular mass was found in the cul de sac, with a loop of terminal ileum entering and leaving the pelvis, well fixed in the mass. The rectum was well fixed into it, and this in turn was fixed to the right pelvic wall, just below the brim of the pelvis. The bowel was freed, brought up, and there was found to be a thickened terminal foot of ileum extending into the cecum. In places, the bowel was so thick, that the lumen was practically obliterated. In the mesentery, immediately proximal to the bowel, there was evidently an ulcerated lymph gland which had caused the inflammatory process to be carried on to such a degree in the pelvis. The induration in the rectum was merely inflammatory from the surrounding structures.. There was in the lateral wall of the pelvis an indurated mass which was evidently an extension of this procedure. With such an extensive area of pathology, the only treatment was resection of the terminal ileum and cecum, with a small portion of the ascending colon. The involved area was clamped between Mayo forceps and divided by the cautery. Approximately 12 to 15 inches of terminal ileum, with the cecum, and three inches of ascending colon were resected, leaving the blood supply to the rest of

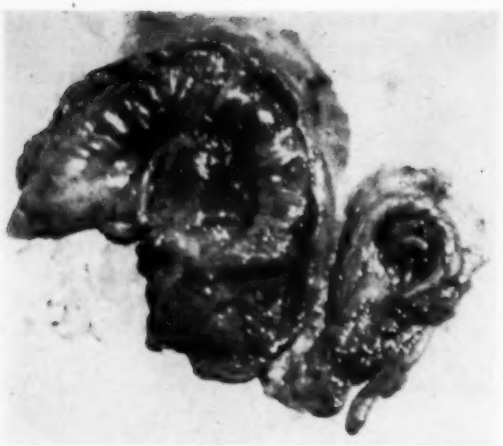

Fig. 2—Terminal ileum, coecum and appendix, showing nodular mucosa resulting in so-called "cobble-stone" appearance.

the bowel intact. The proximal ileum was closed with three layers of 00 chromic and a latero-terminal anastomosis was done by uniting the site of the terminal ileum with the ascending colon. A double row of sutures were placed here just as in a gastro-enterostomy. The wound was tested for leakage and found secure. The mesentery was closed with #2 after all bleeders were tied. Ten grams of sulfanilamide crystals were sprinkled into the area and into the pelvis. A Penrose drain was inserted into the pelvis, and right pericolic gutter in the area of anastomosis, and the drains were brought out through a stab wound in the region of the anterior superior spine on the right. The abdomen was closed in layers with chomic #2 to peritoneum, and fascia, plain #1 to the fat, and clips to the skin.

Post-operative diagnosis: Regional enteritis, or segmental enteritis.

The pathological report follows:

Gross Pathological Findings: The specimen consists of the terminal end of the ileum and the first portion of the cecum. They measure, respectively 26x8x2½ cms, and 5x6x2½ cms. The wall of the ileum, and the portion of the cecum removed, show a marked thickening. The regional lymph nodes are enlarged and firm in consistency. The serosa is rough and granular in appearance and injected in some areas. In other areas, it presents a dull appearance. In some places, the mesenteric fat appears to be growing around the bowel. The proximal portion of the ileum presents a marked degree of edema of the component parts of the intestinal wall. Upon opening the intestine, the mucosal surface shows an obliteration of the transverse folds, and the mucosa presents a nodular appearance and is red in color. Several widened, thickened longitudinal ridges of the mucosa can also be found. Several longitudinal, yellowish, depressed streaks of tissue giving the appearance of scar tissue, are found. No recent ulcerations are noted. The appendix, which is attached to the cecum, measures ½ cm in diameter and 6 cms in length. The serosa is found to be slightly thickened and dull in appearance. Upon making multiple cross sections, the lumen of the distal portion is found to be obliterated. Representative sections are taken for microscopic study.

Histologic Examination: In some sections, there is a marked edema of the submucosa and serosa, with a cellular infiltration of lymphocytes and plasma cells. These are diffusely infiltrating, and at times, assume a focal nodular arrangement. There is a degeneration and desquamation of the epithelium of the villi, and dilatation of the lymphatics of the villi can be noted. The muscularis shows a hypertrophy of the individual muscle cells, which in some areas, are separated by infiltrations of round cells which are predominately of the plasma cell type. The serosa shows a proliferation of the mesothelial cells, with desquamation and replacement of these cells by eosinophilic straining, hyaline membrane, in some areas. The sub-

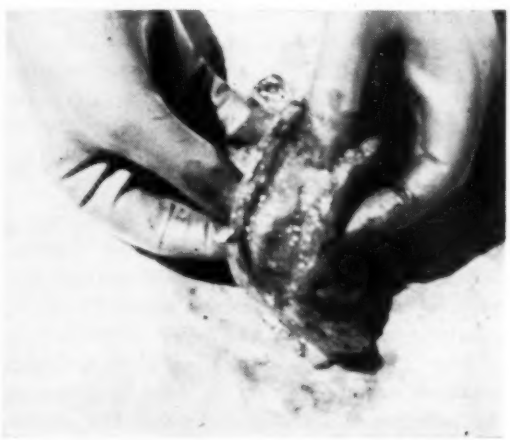

Fig. 3—Terminal ileum showing thickened wall and obliteration of transverse folds and villi, being substituted by broad, solid, longitudinal ridges.

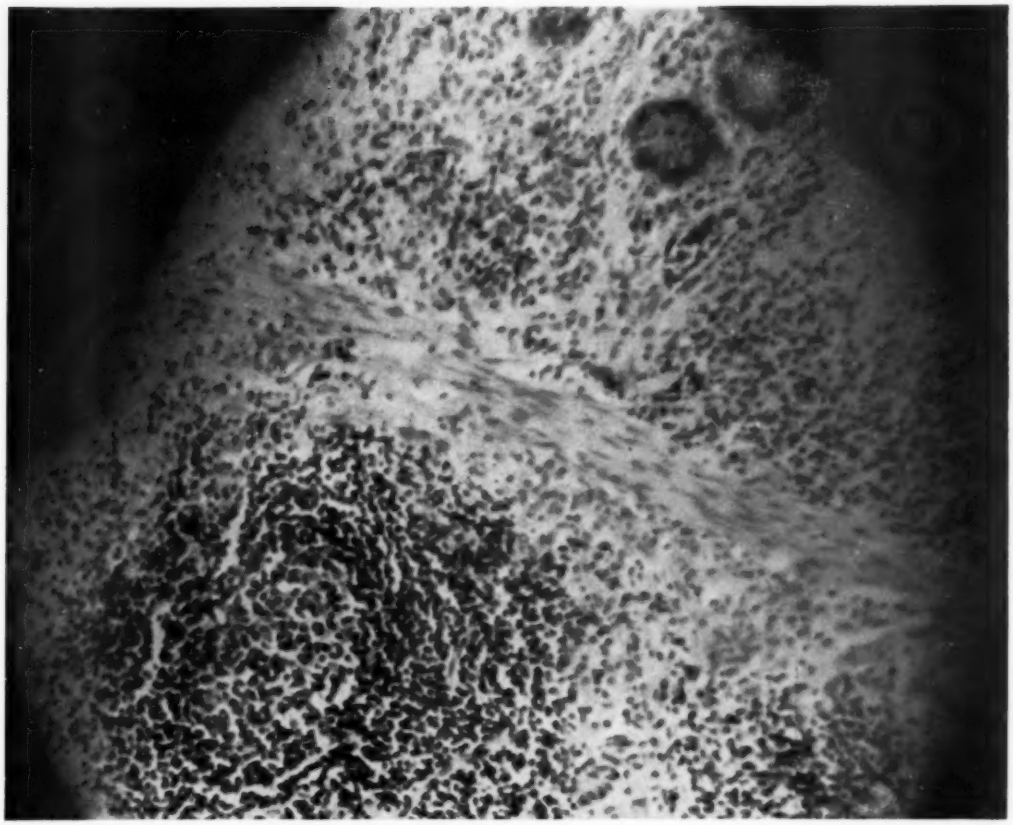

Fig. 4—Invading round cells of submucosa with follicle formation showing straightened out muscularis mucosae.

serosal tissues are also infiltrated with inflammatory cells, and show a fibrous tissue proliferation separating these cells into small follicle-like masses. In the vicinity of these follicles, foreign body type of giant cells are noted. In some areas, giant cells are also found in the submucosa. In some places, the mucosa and submucosa are completely replaced by a proliferation of fibrous tissue. In these areas, a few lymphocytes, plasma cells, and an occasional giant cell are also found. Some sections of the appendix and cecum show similar histologic changes.

DIAGNOSIS

The histologic findings in this case are consistent with those found in regional ileitis.

Her post-operative course was uneventful and she left the hospital on June 23, 1945. She has been seen in the office periodically since then. Her weight has risen to 140 pounds and recheck gastrointestinal motor meal, with barium enema, have shown no signs of recurrence of her trouble.

DISCUSSION

The treatment of chronic regional ileitis is debated by different men. In the very acute stage, short circuiting operations such as ileotransverse colostomy have a very valuable place. Such an operation may be followed at a later date by resection of the involved portion of the bowel when and if indicated. Many of these patients are opened under a diagnosis of acute appendicitis. In these cases, some men prefer to do nothing but close the abdomen, after removing the appendix, and sometimes the acute process will subside completely. In the chronic form, resection of the involved area with an anastomosis of the bowel is the method of choice, in my opinion. Care should be taken, however, to examine the entire small bowel, particularly, and also the large bowel to see if there are any "skip" areas present. Frequently, areas of nor-

mal healthy bowel will be found between the pathological areas, and when found, the "skip" areas should also be included in the resection together with a generous area of healthy bowel on each side. The problem of recurrence cannot be forecast. The occurence of diarrhea post-operatively does not necessarily mean that the process is recurring. In fact, many of the authors quote this as an important symptom post-operatively, especially after three to six months, and say that such cases have less chance of having a recurrence, than those cases which do not have diarrhea for several months. This girl had a mild, persistent diarrhea for nearly three months post-operatively. This has now subsided entirely, and her bowels are moving once a day. It is generally believed that recurrences are, in a large amount, due to either one of two things, namely: (1) Not removing sufficient healthy bowel on either side of the involved area, and (2) Leaving behind an area of pathology separated from the main area of enteritis by a so-called ' skip'' area. Lymphatic metastasis, however, cannot be excluded as a means of spread, nor can direct extension along the bowel wall be excluded.

DISCUSSION OF PATHOLOGICAL LESION

Dr. Maurice Rosenthal

The lesion in regional ileitis may affect virtually any part of the gastrointestinal tract, and terminally, it may even involve all parts of the abdominal cavity, as reported by Crohn. However, the great majority of reported cases indicted that the process originated in the terminal ileum. The typical lesion in the terminal ileum grossly reveals a thickened and firm intestine.

In the chronic stages, the wall is thick and firm, like a "garden-hose". Fibrous adhesions between the loops of small intestine and the large intestine, may result in kinking, with partial intestinal obstruction. Occasionally, segmented parts of the ileum are affected, resulting in the so-called "skip" type of lesion. The gross examination also shows a swollen, edematous, firm and stiff intestine, with an injected, granular, rough-appearing serosa, which is dull in contrast to the smooth, shiny, neighboring, uninvolved serosa. The mesentery is usually thickened and may be fibrotic. The mesenteric blood vessels are prominent and at times varicose in character. The regional lwmph glands may be enlarged, soft and edematous in the acute and sub-acute cases. Upon making a cross section, the lumen is found to be narrowed due to thickening of the component layers of the intestinal wall. In the acute and sub-acute cases, most of the thickening is due to edema and cellular infiltrations of the sub-mucosa, whereas in the later stages of the disease, the thickening is the result of fibrosis in the serosa and sub-mucosa, with hypertrophy of the muscularis.

The mucous surface may present several characteristic changes. The transverse folds and villi may be obliterated and replaced by a varied number of nodules and small papillomata projecting from the surface of wide, firm longitudinal ridges. These changes produce a so-called "cobble-stone" effect of the mucous surface. The broad, longitudinal ridges are separated in some cases by penetrating sinuses, and irregularly winding ulcerations. The surface epithelium of the ridges and papillomata may be denuded in some areas.

HISTO-PATHOLOGIC CHANGES

When a survey of the literature is made, it is found that the histologic changes are varied, and depend upon the different stages of the disease. Thus, in suitable cases, when different stages of the pathologic processes are systematically examined, a series of pathological events can be deduced. The pathologic changes may be divided into two important phases: the primary phase is characterized by edema, hyperemia, dilatation of the lymphatics, and cellular infiltration of the submucosa and serosa. This is followed by a diffuse fibrous tissue proliferation and healing. The secondary phase is characterized by ulceration and fistula formation, superimposed on any of the stages of the primary lesions. The earliest stage is characterized by edema of the submucosa and serosa, with dilatation of the submucosal lymphatics, and hyperemia of the juxta-muscular adventitial blood vessels. These early primary changes are soon followed by a diffuse round cell infiltration of the edematous tissue. The infiltrating cells may be arranged in cords, masses, or diffusely scattered. In this early stage, no tendency towards follicles or nodular formation can be observed. Furthermore, the infiltrating round cells can be distinguished from the lymphoid cells of the submucosa, which show no histologic changes of significance. Apparently, these invading cells

usually remain localized in the submucosa, unless ulceration of the mucosa with secondary infection supervenes. In that case, the invading cells may infiltrate into intra-mural abscesses, which are, at times, found. This cellular infiltration soon results in a rapid proliferation of fibroblasts among the round cells. Gradually, an intricate reticular tissue is laid down by the fibroblasts which increases in quantity, with a gradual disappearance of the round cells. At this stage, if there is no complicating ulceration of the mucosa, the submucosa heals by fibrous tissue replacement. However, if ulceration has supervened, the reticular tissue proceeds to entrap small masses of round cells which resemble lymph follicles. They are not true lymph follicles, however, as they consist of plasma cells, and usually are found nearer the muscular layers. Although the muscular coats are not involved by the primary processes of edema and cellular infiltration, hypertrophy of the muscle fibers has been observed in the earlies lesions. Furthermore, hypertrophy of the muscularis persists throughout the various stages of the disease. It is to be emphasized however, that if ulcer and fistula formation complicate the early primary lesions, a variety of pathological changes may result in the muscularis. Round cell invasion and secondary infiltration with polymorphonuclear leukocytes and eosinophiles, may be observed separating the individual fibers. The adventitial layer of the intestine, in the earliest stages, shows a massive edema and profuse hyperemia with interstitial hemorrhages. Soon a slight round cell infiltration takes place, but the characteristic large, dense cellular infiltrations of the adventitia are only found where there is extensive complicating ulcerations of the mucosa. When the lesions in the adventitial layer become older, characteristic lymphoid-like follicles, giant cell nests, and infiltration of fatty tissue may be found. The mesothelium of the serosa also shows alterations. These cells of the serosa may show swelling, degeneration, and desquamation. A thick layer of hyaline material may be found replacing the desquamated cells. The infiltrating fat previously mentioned, is found to be continuous with the mesentery, and may completely encircle the bowel in older lesions. An endarteritis obliterans of the sub-mesothelial blood vessels may be observed in some cases. Further examination of the adventitial layer and mesentery reveals that the nerves leading towards the bowel are distinctly swollen and round cell infiltrations in the zone of Auerbach plexus may be found in some of the early cases.

Etiology:- Various causes, including bacteria, parasites, trauma, ingested inert foreign bodies, and lymphatic block, have been considered, but none of these have been definitely proved. Recently a new etiological factor has been suggested by Schepers. He believes the disease is caused by neuropathic disturbances involving Auerbach's and, or Meissener's plexuses, or mesenteric and coeliac ganglia. He believes the original neuropathic lesion is a type of visceral herpes zoster. Furthermore, he suggests that the chronic type of secondary ulceration only occurs when ganglionic lesions are not only irritative, but destructive, and this results in denervation of the affected bowel wall.

SUMMARY

A case of chronic regional ileitis without complications, as classified by Kieffer and Ross[1], has been presented. Resection of the diseased ileum and cecum has resulted in an apparent cure. On leaving the hospital the patient weighed 90 pounds, and ten months later she weighs 150 pounds, looks well, and enjoys a very active life.

Regional ileitis is a rather uncommon disease of uncertain etiology. There are several suspected etiological agents[2 4]. It was recognized as a disease entity in 1932 by Crohn and his coworkers[3].

The diagnostic symptoms and signs in this case were: 1. diarrhea alternating with constipation, 2. pain, cramps, epigastric and suprapubic, especially late in the day, 3. fever, 4. nausea, 5. vomiting, 6. loss of weight (from 122 to 103 pounds) 7. anemia, 8. localized abdominal tenderness, suggestive of appendicitis, but lacking the rigidity and re-bound tenderness of appendicitis, 9. increased sedimentation rate, 10. negative stool (except for occult blood) and negative urinary findings, 11. polymorphonuclear leucocytosis, variable, 12. temporary, or no improvement on penicillin and sulphonamide therapy, 13. X-ray evidence, showing narrowing of the terminal ileum.

The above signs and symptoms seem to be typical of chronic regional ileitis without complications as reported in recent literature[1 3]. According to current literature[1 3] the diagnosis

is commonly made at operation, but the usual pre-operative diagnosis is appendicitis.

REFERENCES

1. Kieffer, Everett D., and Ross, John R.: Criteria in the Management of Chronic Ileitis, J.A.M.A. 129: 104-108 (Sept. 8) 1945.

2. Felsen, Joseph: Bacillary Dysentery, Colitis, and Enteritis, Philadelphia, W. B. Saunders Company, 1945.

3. Crohn, B. B., Ginsburg, L., and Oppenheimer, G., Regional Ileitis: A Pathologic and Clinical Entity, J.A.M.A. 99:1323-1329 (Oct. 15) 1932.

4. Schepers, G. W. H.- American Journal of Digestive Diseases, Vol. 12, No. 4, pp. 97 to 116, 1945.

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Editorials

Plans Announced For 1946 Clinical Congress of American College of Surgeons in New York

The American College of Surgeons announces that arrangements have been completed for the holding of its Thirty-second Clinical Congress at the Waldorf-Astoria, New York, September 9 to 13 inclusive.. Plans include the usual extensive program of demonstrations, scientific sessions, panel discussions, symposia, forums, Hospital Standardization Conference, medical motion pictures, business meetings, and educational and technical exhibits, which will be held in the headquarters hotel, and operative and non-operative clinics in the local hospitals.

This will be the first Clinical Congress since the meeting in Boston in 1941. Since that time, 2,744 surgeons have been received into fellowship in absentia, and to them in particular the Convocation on the opening night of the Congress will be a long anticipated event. Many of these new Fellows will have recently returned from service with the armed forces. The formal initiation ceremonies, always impressive, will be exceptionally so this year because of the large number of new Fellows admitted during the past four years who are expected to be present.

Officers, Regents, and Governors have remained in office since 1941 because of the cancellation of annual meetngs of the Fellows. Especial interest will also therefore be attached to the installation of the officers-elect, headed by Dr. Irvin Abell, Chairman of the Board of Regents, as President. Dr. W. Edward Gallie of Toronto has been President since November, 1941. Dr. Gallie will give the Presidential Address at the Presidential Meeting and Convocation on the evening of September 9 in the Grand Ballroom of th Waldorf-Astoria.

Dr. Howard A. Patterson and Dr. Frank Glenn of New York City are Chairman and Secretary respectively of the Committee on Local Arrangements. Dr. Henry Cave of New York, a member of the Board of Regents of the College, is also active in directing the local plans for the meeting, attendance at which is usually around five thousand surgeons and hospital representatives.

The Arizona Trudeau Society

The Arizona Trudeau Society was founded by correspondence during the summer of 1945 by a committee composed of Drs. E. J. Nagoda, Benson Bloom and W. H. Oatway, Jr., all of Tucson.

Twenty-seven members applied for membership, and requested affiliation with the American Trudeau Society.

The first meeting was held in the Staff Room of the Pima County General Hospital at Tucson, on February 24, 1946. At a business section the society was organized with E. J. Nagoda as Chairman, H. S. Randolph, of Phoenix, as vice-chairman, Lloyd Swasey of Phoenix, as Treasurer, and William H. Oatway, Secretary. A brief constitution was adopted. Phoenix was adopted as the next meeting site for the fall of 1946. Dr. John Steele and Dr. John Alexander were elected honorary members.

A program section was attended by thirty-five physicians and several hospital supervisors.

Reports were given by Dr. Nagoda on the intrapleural use of penicillin; by Dr. Randolph on the aspiration treatment of tuberculosis empyema; by Dr. Kurlander (of the State Health Department and USPHS) on sample case-finding in Arizona by photofluorography; by Dr. Oatway on a cooperative survey of tuberculosis methods in use in Arizona hospitals. Dr. John Steele of Milwaukee, Wisconsin (member of the Committee on Therapy of the American Trudeau Society) gave a report on streptomycin. He also read the guest paper of the day 'The Use of Paraffin Plombage'. Dr. John Alexander was unable to present his paper on 'Pulmonary Resection in Tuberculosis.'

The American College of Physicians

The twenty seventh Annual Session of the American College of Physicians was held in Philadelphia on May 13-17. The last meeting was in 1942 as subsequent sessions were suspended due to the war. The registration for the meeting was just a little below 4,000, This was considered an excellent record, as the college enrollment, including Fellows and Associates, is about 6,500. The following are a few highlights of the program:

1. Medicine in the Armed Forces. In the European Theatre Operations there were 46 cases of typhoid fever with 2 deaths and one death from tetanus. The credit for this remarkable record goes to the lessons learned by the medical personnel of your army in the first world war plus our excellent system of disease prevention by innoculation. There were hundreds of deaths in the German army from typhoid and tetanus, and their death rate from combat casualties was as high as ours in the first world war, while our death rate was only 20% of that of the first world war. This is an indictment of the Compulsory Health system of Germany which began in the days of Bismarck.

In the Pacific Theatre the three diseases encountered were: malaria, Scrub typhus and Schistosomiasis. Atabrine is still the drug of choice for treatment of malaria. The newer drugs are still very toxic and should not be used until atabrine has been given in several courses.

2. Streptomycin. This drug may be given intravenously, intramuscularly and intraspinally. Not absorbed in the intestinal tract as 98% is found in stools. It is eliminated through the kidneys. For meningeal conditions it must be given intraspinally as very little is found in the subarachnoid space if given by the other routes. It is most effective in tularemia, influenzal meningitis and certain mixed infections of the kidney. An interesting feature about the treatment of these mixed kidney infections is that bacteria which are resistant to streptomycin will flourish after non-resistant organisms are eliminated, and in some instances a patient may become worse. The drug has no effect on typhoid and brucellosis. There is not much information available on tuberculosis except that it has an inhibitory effect on the growth of the tubercle bacilli in guinea pigs, but this has not been duplicated in the human although in cases of miliary tuberculosis there has been some evidence of healing as shown at autopsy. Spinal fluids have returned to normal after its administration, but so much damage was done that all cases died. Streptomycin is very toxic as 20% of the patients develop untoward symptoms such as skin eruptions, fever after the 8th to 10th day, vertigo, tinnitus and deafness, but all of these subside after 6 to 8 weeks. There is renal irritation also with increase in casts and albumin in the urine.

3. Penicillin. Penicillin is a very useful drug in neuro-syyphilis. Pain is the symptom most likely to be influenced - e.g. 2 out of 3 cases of gastric cases were relieved.

4. The Harvard Medical School has developed an antihemophilic globulin which will bring the coagulation time in a hemophilic patient to normal when injected. It is used only in emergencies of course, because as soon as it is discontinued the effect is lost. But these people may be operated on or their injuries treated as in any other patient when it is administered.

5. A test of coronary insufficiency was described. Electro-cardiographic studies are made on a patient after he has been breathing a mixture of 10% oxygen and 90% nitrogen for 20 minutes.

6. Reflex sympathetic dystrophy was described. This explains post traumatic conditions which persist after a normal period of recovery has elapsed. It requires sympathectomy to relieve it at times.

7. Transpleural sympathectomy, sectioning the vagus nervum to the stomach for treatment

of peptic ulcer. The result is a diminution in the secretion of free hydrochloric acid.

8. Acute hepatitis. This was observed mostly in armed forces. Etiology is unknown. Prolonged bed rest emphasized with repeated liver function tests to prevent relapses and possible chronic cirrhosis.

9. Thiouracil and radio-active iodine are most effective in hyper-thyroidism.

10. Sympathectomy for relief of malignant hypertension. Selection of cases. Patients under 40 years of age with low pulse pressure and absence of renal damage give best results.

11. 50% of cases of adhesive pericarditis are relieved by operation.

12. Pulmonary embolism much more common as medical cases than as complications of surgical cases. The diagnosis is often missed.

13. Treatment of leukemia by a urine extract from cases of myeloid leukemia.

Members of the College attending from Arizona were: From Phoenix - Fred G. Holmes, Leslie R. Kober, W. Warner Watkins, Hilton J. McKeown and Frank J. Milloy. From Tucson- W. Paul Holbrook.

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Council on Pharmacy and Chemistry

REPORT OF THE COUNCIL

The following report has been adopted by the Council for publication.

Austin Smith, M. D., Secretary

PREPARATIONS EXEMPT FROM COUNCIL CONSIDERATION

The following official preparations have been declared exempt from Council consideration for inclusion in New and Nonofficial Remedies, as their actions, uses and nature are sufficiently well understood by physicians not to require such inclusion.

This list has been adopted for publication so that it may be brought to the attention of all manufacturers and other interested groups. From time to time there may be added other drugs, the names of which will also be published.

Iron and Ammonium Citrates
Ferrous Sulfate
Calcium Gluconate
Antimeningococcic Serum
Liver and Stomach Preparations included in U. S. P.
Digitalis Preparations included in U. S. P.
Acetylsalicylic Acid
Caffeine with Sodium Benzoate
Carbon Dioxide
Oxygen
Oxygen-Carbon Dioxide Mixtures
Chlorinated Paraffin (Chlorocosane)
Cinchophen
Neocinchophen
Dextrose Solution
Sodium Chloride Solution
Isotonic Solution of Three Chlorides
Sodium Citrate
Sodium Biphosphate
Magnesium Sulfate
Trioxymethylene [Paraformaldehyde- U. S. P. X)
Methylene Blue
Quinine and Urea Hydrochloride
Salicylic Acid
Sodium Salicylate
Natural Oil of Sweet Birch (Methyl Salicylate)
Pentobarbital Sodium
Papaverine Hydrochloride
Emetine Hydrochloride
Totaquine
Tribasic Calcium Phosphate
Magnesium Trisilicate
Tribasic Magnesium Phosphate
Ichthammol Preparations
Strophanthin

Office of the Surgeon General

GENERAL KIRK OUTLINES ADVANTAGE OF REGULAR ARMY CAREER FOR DOCTORS

Advantages offered in the Regular Army for the purpose of attracting doctors to maintain the Medical Department's high wartime standards were outlined by Major General Norman T. Kirk, Surgeon General of the Army, in a recent talk at convocation ceremonies for the 44th General Hospital and the 135th Medical Group at the University of Wisconsin.

"All general hospitals," General Kirk stated, "will be centers for certain types of cases, where medical officers will get exceptionally wide and varied experience in residency-type training. It is our policy to assign and train these medical officers so that they may obtain board certification by the American Specialty Boards.

"Also, looking to the future when some other emergency might arise, we are working on a program that will preserve and foster the kind of cooperation and assistance which your 44th General Hospital and 135th Medical Group gave us. We will look to the 'sponsored' medical units to provide the qualified, integrated personnel for the operation of certain types of military hospitals and other medical units. In time of an emergency, mobile and fixed hospitals must be completely integrated units, each with a harmonious staff of competent doctors so coordinated and organized as to function with the least possible delay. The civilian-sponsored medical units organized and staffed by our large medical institutions meet these requirements. They provide for early availability, early departure and immediate employment in an emergency."

General Kirk praised the "esprit de corps that is surpassed in but few organizations" and commended the 44th General Hospital and the 135th Medical Group for their record in World War II.

The 44th is well-known for its stand against an attack by Japanese troops on Leyte, when several doctors were injured. The Japanese dead numbered seventy-five.

NEW STREPTOMYCIN ALLOCATION PROGRAM TO MAKE PROVISION FOR CIVILIAN USES

The Army Medical Department, which has received many requests for supplies of streptomycin to be used in treating civilian cases, has announced today that all civilian inquiries and requests for this drug are to be sent to Dr. Chester S. Keefer, Evans Memorial Hospital, 65 East Newton, Boston, Massachusetts. Telephone Kenmore 9200.

Dr. Keefer is Chairman of the Committee on Chemotherapeutic and Other Agents of the Division of Medical Sciences, National Research Council, and has been authorized to handle civilian requests, providing they are submitted by a physician giving sufficient technical information to enable him to decide whether streptomycin is indicated in the treatment of the case.

Distribution of limited supplies of streptomycin to civilians through the Committee on Chemotherapeutic and Other Agents of the Division of Medical Sciences, National Research Council, has been provided for in the allocation program recently established by the Civilian Production Administration. Other agencies receiving allotments of the scarce drug include the Army, Navy, Veterans Administration, and the United States Public Health Service.

Although there has been a general misconception that the Army controls the total streptomycin supply, actually an approximate thirty per cent will be allotted to the Army from the production for the month of March. The bulk of the limited supply received by the Army has been employed in treating urinary tract infections associated with spinal cord injuries, and a few serious infections which have proved resistant to penicillin. At no time has the allotment been adequate to permit any extensive research, such as experimental work on the treating of tuberculosis. In order that Dr. Keefer may obtain an adequate supply for civilian appeals, the Army haa voluntarily agreed to a delay in its March delivery of streptomycin from producers.

Grants-in-aid of approximately $500,000 for the clinical study of streptomycin, contributed in equal shares to the National Research Council by eleven pharmaceutical manufacturers, has already been announced by the Chemical Division of the Civilian Production Administration. The participating firms constitute the Streptomycin Producers Advisory Committee of the CPA.

Dr. Keefer, who headed the clinical investigation of penicillin, will be in charge of the similar program on streptomycin and will submit recommendations, together with a report on the results. The CPA has announced that there will be no commercial distribution of streptomycin at this time, nor will the producers supply the drug directly for civilian requests. Physicians have been asked not to submit requests for streptomycin if the cases are susceptible to the action of the sulfonamides, penicillin and other therapeutic agents.

The production of streptomycin, which was approximately 3,000 grams last September, is expected to increase to nearly 27,000 grams by March. A companion drug to penicillin, streptomycin is produced in a similar manner, by fermentation and chemical extraction, and, like penicillin, requires carefully controlled conditions of temperature, air and sterility. It is expected to prove a valuable supplement in cases where infections do not respond to penicillin treatment, but studies have not yet advanced to the point where the methods of administration or the amenable diseases are definitely known.

THE JOURNAL OF VENEREAL DISEASE INFORMATION

The Effect of Treated Acquired Syphilis in Life Expectancy. Dudley C. Smith and Martha C. Bruyere. Journal of Venereal Disease Information, Washington, 27: 39-46, Feb. 1946.

It was found that the average life span of persons under routine therapy for syphilis was shorter than that of the uninfected persons, when the mortality in a general population was compared with the mortality in that portion of the same population that had been treated for syphilis.

Mortality data of the general population were supplied by the Bureau of Vital Statistics and data concerning the syphilitic por-

tion of the population from the records of 2,908 syphilitic patients admitted to the University of Virginia Hospital, 15 to 75 years of age. It is important to note that practically all of the population considered was within an area where a venereal disease control program has been going on since 1920.

At age 30 the temporary life expectancy of white males to age 75 with syphilis was 5.5 years less than that of the general population at the same age, and that for negro males to age 75 the decrease due to syphilis was 4.2 years, for white females to age 65, 4.9 years. Among negro females to age 75 there was little difference, the loss being only one-half year.

Mortality Trends for Syphilis. Lida J. Usilton. Journal of Venereal Disease Information, Washington, 27: Feb. 1946.

That the syphilis death rates for the U. S. has steadily declined from 15.0 in 1939 to 12.1 in 1943, with every region contributing to the lowered rate, is indicated by mortality data compiled from Bureau of Census tabulations. The southern and western States experienced greater percentage decreases than did the northern States, but their 1939 rates were considerably higher.

In the study, separate investigations were made for death rates from syphilis in children under 1 year of age, paresis, and tabes dorsalis.

Data for the years back to 1933 are included in the investigation of congenital syphilis. From 1933 through 1943, there has been a marked decline in death rates from syphilis for infants under 1 year of age. The rate for the United States as a whole was less than one-third that in 1933, and this same trend was observed in every region of the country. The greatest decrease was noted in the northeastern States, from 0.52 in 1933 to 0.12 in 1943. Since 1938, the rates in the southern States have dropped precipitously, although there had been little change in the trend previously. The decline in infant mortality rates in general venereal disease control, but more due to syphilis reflects not only improvement specifically the prevention of occurrence of congenital syphilis through treatment of syphilis in women during pregnancy and the finding and treating of children under 1 year of age who have congenital syphilis.

Investigations of mortality due to paresis and tabes dorsalis include the years 1910 through 1943. The mortality rates per 100,000 population for paresis were highest in 1917. The upward trend flattened out from 1922 to 1923, and from 1923 to 1937 there was a constant downward trend. Malaria therapy for the treatment of paresis introduced in 1922 may have been largely responsible. The rates fell rapidly from 1923 to 1930, and then declined gradually until 1937. Since 1937, the rate has remained at approximately the same level, 3.0 to 3.5. For the States reporting since 1910, the rate fell from 7.55 in 1923 to 3.26 in 1937; for the expanding death-registration area, the respective rates were 6.59 and 3.23.

The mortality rates from tabes dorsalis has continuously decreased since 1910, with the rates for States reporting in 1910 being 2.66, and 0.57 for 1943; in the expanding area of death-registration, the rate fell from 2.66 to 0.47. The tendency toward a low constant rate seen in the data relating to paresis has not yet been observed in the tabetic death rates.

ARIZONA MEDICAL SERVICE

The House of Delegates of the State Association, meeting in regular session on May 3, approved a medical service plan for the people of the State of Arizona. It will begin by providing surgical and obstretrical care for group-insured hospital patients. It will also provide care for fractures both in and out of the hospital. The State Association's Committee on Medical Economics and the State Council have been working on the plan for two years. It will be administered by the Arizona Blue Cross under the directorship of Mr. L. Donald Lau. The general outline of the plan was worked out at this meeting. Special sessions of the House of Delegates and the Council will be called during the summer to adopt articles of incorporation, by-laws, the election of officers and a board of directors. The service will cover the employee and his family and unmarried dependents under nineteen years of age. It is anticipated that the plan will be in operation by Sept. 1.

NEWS RELEASE

The next oral and written examination for Fellowship in the American College of Chest Physicians will be held at San Francisco on June 29, 1946. Applicants for Fellowship in the College who plan on taking the examination should communicate with the Executive Secretary, American College of Chest Physicians, 500 North Dearborn St., Chicago 10, Illinois.

The Twelfth Annual Meeting of the College is scheduled to be held at the Sir Francis Drake Hotel, San Francisco, June 29-30, July 1-2.

Murray Kornfeld, Executive Secretary

ORGANIZATION SECTION

GEORGE O. BASSETT, M. D., President

Directory

ARIZONA STATE MEDICAL ASSOCIATION

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COMMITTEES*

Scientific

Cancer Control—A. L. Lindberg (1947), Tucson; E. Payne Palmer (1945), Phoenix; M. G. Wright (1945), Winslow, and J. N. Stratton (1946), Safford.

History and Obituaries—Hal W. Rice, Historian, Bisbee; Donald P. Hill, Tucson, Frank J. Milloy, Phoenix.

Industrial Health—John D. Hamer (1947), Tiger; Chas. B. Huestis (1946), Hayden; E. M. Hayden (1945), Tucson.

Maternal and Child Health—L. C. McVay (1947), Phoenix; Howard C. James (1945), Tucson; W. P. Sherrill (1946), Phoenix.

Orthopedics—Geo. L. Dixon (1947), Tucson; E. W. Adamson (1946), Douglas; James Lytton-Smith (1945), Phoenix.

Scientific Assembly—George O. Bassett, President-elect and Chairman (1950), Prescott; Carl H. Gans (1947), Bisbee; G. F. Manning (1946), Flagstaff; Frank J. Milloy (1945), Phoenix.

Scientific Education and Postgraduate Activities—A. H. Dysterheft (1946), McNary; A. I. Podolsky (1947), Yuma; Florence B. Yount (1945), Prescott; Chas. S. Kibler (1945) Tucson.

Syphilis and Social Diseases—L. H. Howard (1947), Tucson; L. G. Jekel (1946), Phoenix; George O. Bassett, (1945), Prescott.

Tuberculosis Control—James H. Allen (1947), Prescott; Samuel H. Watson (1946), Tucson; E. W. Phillips (1945), Phoenix.

Non-Scientific

Auxiliary Advisory—Geo. R. Barfoot (1947), Phoenix; W. Claude Davis (1946), Tucson; Florence B. Yount (1945), Prescott.

Editing and Publishing—Jesse D. Hamer (1945), Chairman, Phoenix; A. L. Lindberg (1946), Tucson; Walter Brazie (1947), Kingman.

Industrial Relations—Meade Clyne, Tucson; James Lytton-Smith, Phoenix; A. C. Carlson, Jerome; O. E. Utzinger, Ray; John W. Pennington, Phoenix; C. E. Yount, Prescott; Frank J. Milloy, Secretary to Committee.

Medical Defense—D. P. Harbridge, Chairman (1945), Phoenix; A. C. Carlson (1946), Jerome; John W. Pennington (1947), Phoenix.

Medical Economics—C. E. Patterson (1946), Tucson; Meade Clyne (1945), Tucson; Robert S. Flinn (1947), Phoenix.

Public Health Education—M. W. Merrill (1947), Phoenix; J. S. Gonzalez (1946), Nogales; Paul H. Case (1945), Phoenix; Geo. O. Bassett (1945), Prescott.

Public Policy and Legislation—Charles A. Thomas (1947), Tucson; Walter Brazie (1946), Kingman; Jesse D. Hamer (1945), Phoenix.

State Health Relations—Louis G. Jekel, (1947) Phoenix; E. Henry Running (1946), Phoenix; Donald P. Hill (1945), Tucson.

* New appointments will be published in July issue.

President's Message

Very soon after this issue reaches your desk, a called meeting of the Council and the House of Delegates will be held. The sessions are being called, as you know from a lettet sent you immediately after the Annual Meeting, to set up the proposed and adopted Medical Service Plan for incorporation and inauguration. It is burdensome, perhaps, that a special session is required, coming as it will during the summer season, but it will afford a break in the routine for all of us and detract our attention from the summer's heat.

Each member of the Council and House will receive full data relative to the business to be transacted and in time for some study before the sessions which are tentatively set for June 9 for the Council and June 22 (evening) and 23 for the House. It is vitally important that this business be completed and equally vital that each delegate give earnest consideration to each item of business.

We are instituting a Medical Service for the people, not for the physicians. It is the purpose of the Arizona Medical Association to demonstrate that we have a sound understanding of the problems involved and that we have the best methods for solving these problems.

The men who are chosen to serve on the Board of Directors (10 physicians and 5 lay members) and the Professional Committee (5 physicians), as well as the officers of the Corporation to be formed, must be men of broad vision and must be public-minded and unselfish in all aspects related to the SERVICE. On these men will fall the burden of the work.

Let us set a standard in this coming session and guarantee that this SERVICE will be a huge success.

COUNCIL and HOUSE: Set aside the dates above and be ready to attend these important sessions.

Signed

George O. Bassett

President

Secretary's Report

The past year has been a traveling year for your Secretary. In October, Mrs. Coleman and I attended a national meeting of the Council on Medical Service and Public Relations of the Amedican Medical Association at Chicago. In January, Dr. Hamer and I attended a meeting of the National Physicians' Committee at St. Louis at which 45 states were represented by at least 2 delegates each. In February, I attended 3 meetings at Chicago: The Annual Conference of Secretaries and Editors of State Medical Journals; The National Conference on Medical Service, and the Congress of Medical Education. In April I attended hearings on the Murray-Wagner-Dingell bill at Washington, D. C. This might seem at times to be a waste of valuable time, but actual attendance at these meetings is the only way we can determine our own status - whether we are keeping up with other state societies and associations, or whether we are lacking in our activities.

I will not endeavor to cover all these meetings separately as it would be too boresome and take too much space and time. I will cover the main subjects as discussed. I wish to state here that any opinion expressed is not my own personal opinion, as I will endeavor to give you the consensus of opinion on the various topics and problems, and the implications surrounding the decisions. I will say at this time that if the Murray-Wagner-Dingell bill never did anything else it has been the incentive for an unparalleled discussion of our medical economics at the national level.

Concerning our own status:

1. Our public relations program on the radio and in the newspapers ranks with the best in the country. 2. Concerning Medical Service. Our hospital program and proposed medical service plan are about 8 years behind the states who were pioneers in this work - we are about 3 years behind another group of about 10 states - we are in line with about 15 states who are about to launch their plans - and ahead of about 15 states who are doing nothing so far. It was not altogether our fault that our hospital plan did not succeed at first - the organization was perfected about 8 years ago and we did not know what the trouble was until Mr. L. Donald Lau came along. 3. From a national level we have done very little as a state, but this is a difficult problem about which I shall say more later.

To enumerate the subjects for discussion we have:

1. Veterans. Most of the care to be given Veterans will be given by physicians in private practice. The Veterans' Bureau is making contracts with the various state medical societies as rapidly as they can get to it. Present Physicians in the V. A. will be utilized for administrative work. Veterans not needing hospitalization will be cared for by their family physicians. The staffs of Veterans' hospitals will consist of attending men and consultants. They will be selected by the Dean's Committee in the area of the hospital. The attending men will do the bulk of the work - they will be men under 45 and will be requested to spend 5 mornings a week at the hospital. They will receive about $500 a month and will be specialists approved by their respective American Specialty Boards. Members of Veterans' Hospital staffs will not be subject to or under the contract of Civil Service. This is considered one of the greatest victories for the V. A. under the whole set-up. If I might express my own opinion at this time, I might add that I think they are placing their sights for a hospital staff rather high.

These are some of the angles to this Veterans' program: 1. A veteran who makes an affidavit that he is economically unable to pay for non-service connected sickness may receive care. This privilege may be abused. 2. Much criticism of the care of veterans of the last war has been made - and most of it has come from the Medical Profession. Now the whole thing is tossed into our laps and if the program is a failure, we will get the blame. 3. It has been proclaimed editorially that when President Truman signed the present Veterans' Bill, one of the greatest blows so far has been struck against socialized medicine. The very language of the bill, stating that Veterans should be entitled to the best of care, which is rendered only by his family or private physician, indicates this. 4. Remember, 10 million veterans with their wives constitute 20 million, add a couple of dependents or 2 children and you have 40 million. That is a tremendous block of votes for some future date.

The next subject is: Medical Service. This is the most pressing problem before the profession. The A.M.A. is urging every state medical society to prompt action in inaugurating a medical

service plan in each of their respective states, and to increase the benefits of existing services and plans. The House of Delegates of the A.M.A. in December ordered the Board of Trustees of the A.M.A. to proceed with the development of a National Voluntary Pre-payment Plan to cover areas not now covered by a plan. The Board of Trustees announced in February that there was no feasible way in which it could inaugurate such a plan. It pointed out that voluntary health plans must originate at the state level; that complete autonomy must remain at that level and that all the A.M.A. could do about it would be to co-ordinate the various plans, make them as uniform as possible and encourage and promote reciprocity so that people moving around could be protected. It has been pointed out also that less than 10 states are now doing nothing about o so-called plan. This decision by the Board of Trustees has given rise to considerable disappointment from some sources. At Chicago in October, we heard two different proposals for National plans but neither seemed to arouse a ripple of enthusiasm.

A National Service Plan, or national legislation setting up any such organization would defeat the very thing we are fighting against now, namely, a Bureaucracy in Washington or at the A.M.A. headquarters in Chicago, directing us how to run our own state organization.

The next subject is: National Legislation. 1. The Hill-Burton Bill passed the Senate just as we had requested and much to everyone's surprise. That is - it provides grants in aid to states for the construction of hospitals without any strings attached from the Federal Government. It rests in the House of Representatives now. It provides a rare opportunity for you, and that is to write to each of your congressmen (John R. Murdock and Richard Harless) and urge its passage as constructive legislation. It is seldom that we find a piece of national legislation that we can approve. You are urged to follow the suggestion just given. 2. The 3rd edition of the Murray-Wagner-Dingell bill has been introduced in both houses. This bill is the Government's Compulsory Health Insurance Bill. It is camouflaged, however, by several attractive provisions, namely: (1) Grants in aid to states for *a*. The extension of the public health service; *b*. The prevention, control and treatment of venereal diseases; *c*. The prevention, control and treatment of tuberculosis. (2) Grants in Aid to States for Maternal and Child Welfare. (3) Grants in Aid to States for the Needy; (4) Grants in Aid to States for medical education and research. Concerning these provisions, this is the first time that a MWD bill has made any provision for the needy or indigent.

The Magnuson and Kilgore bills have been combined in Congress to provide for Medical Education and Research. This is considered very constructive legislation.

The new Pepper Bill, or super E.M.I.C. bill, has been introduced repeatedly. The modification of present legislation already enacted would provide for tuberculosis, venereal diseases, and public health. It is very probable that most of this legislation will be enacted piece-meal and much of it is not obnoxious if Congress limits its financial aid to those for whom the payment of medical care is a hardship. Our only limit will be the willingness of Congress to appropriate money.

Getting back to the Government's Compulsory Health Insurance Plan which is the real issue in the MWD bill, this bill was introduced in the House last year where it was referred to the Ways and Means Committee of that body. This Committee employed a group of experts to investigate the problem of cost. These experts found that it would require between 15 and 17 billion dollars a year to finance and administer the Bill. As originally set up the Bill provided for a 3 billion 2 hundred million dollar a year cost to be raised by a 4% deduction from payrolls and a like sum from employers. This information will be the main ace-in-the-hole against the proposed legislation.

An interesting part of the Chicago trip was attending the National Conference on Medical Service. This is an organization entirely separate from the A.M.A. but all the A.M.A. people were present. It is in reality an open forum in which representatives from all sides are invited to speak. Nelson P. Cruickshank was invited to speak for Labor. He is the Director of Social Security of the AF of L. He is of the brain-trust type, a brilliant young intellectual, and if he had been among friends, or even before a neutral audience, he would have received much applause. He told us that Labor respects American Medicine for its scientific advancements but has a very low opinion of its economic approach.

He stated that the only way in which an American laborer could receive adequate medical care was by budgeting, and that Government Compulsory Health Insurance was the only answer or solution. He stated further that this traditional patient-physician relationship was just a myth. It is amazing how such brilliant people can point out all the defects in a system and how firmly and sincerely they believe that if only a law can be passed by Congress, all their problems will be forever solved.

Mr. Cruickshank was followed by J. S. Jones, Secretary of the Minnesota Farm Bureau Association, who held his audience spell-bound for 45 minutes telling us of his 65,000 members, over 40,000 of whom belong to Blue Cross. He emphasized that they want no part in Government administration of Medical Care.

Your Secretary, in April, also attended the Washington hearings on Senate 1606, the Murray-Wagner-Dingell bill. I was there for four days and sat in on the hearings during that time. While in Washington I also called on Senators Carl Hayden and Ernest McFarland and on Representatives John R. Murdock and Richard Harless. I found them all gracious, liberal with time for appointments, and most interested in our plans for a Medical Service for Arizona. As to the hearings on the MWD bill, there are 8 to 1 witnesses being called in support of the legislation to those against it. This is to be expected as Senator Murray, one of the proponents of the measure, is Chairman of the Committee on Education and Labor which is conducting the hearings. Since my return from Washington, our Association has filed its brief against S. 1606 and we are on record as declaring the MWD measure unnecessary in view of the Medical Service Plan soon to be inaugurated in Arizona.

It has been a pleasure, as well as a task, to have attended these various conferences in the interest of our Association. I only hope that our Association will profit by what has been learned from these contacts.

Signed

Frank J. Milloy

Secretary

Staff Meetings

ST. JOSEPH'S HOSPITAL, PHOENIX

March 11, 1946

Modern Management of Edema — Dr. Ian Stevenson.

Meningococcemia and Its Manifestations — Dr. L. B. Smith.

Acute Urinary Retention from an Unusual Cause — Dr. J. W. Pennington.

April 8, 1946

Polycythemia, with presentation of two cases — Dr. Jos. Wepfer.

Coccidioidal Granuloma, with presentation of case — Dr. James Coffey.

MARICOPA COUNTY MEDICAL SOCIETY

March 4, 1946

Symposium on "Proposed Medical Service Plan For Arizona." — Dr. Robert S. Flinn, Moderator.

1. Synopsis of Plan — Mrs. K. Coleman, Exec. Secy. Arizona Medical Assoc.

2. Administrative Aspects in Conjunction with Arizona Blue Cross Hospital Service Plan — Mr. L. Donald Lau, Exec. Director Arizona Blue Cross.

3. Report on Chicago Medical Service Conferences — Dr. Frank J. Milloy, Secy. Arizona Medical Assoc.

4. Conclusions — Dr. Robert S. Flinn.

ST. MARY'S HOSPITAL, TUCSON

March 19, 1946

Case of Lupus and Polyarteritis — Dr. W. P. Holbrook.

Case of Abdominal Pregnancy — Dr. H. C. James.

PIMA COUNTY MEDICAL SOCIETY

March 12, 1946

Penicillin in the Treatment of Syphilis—Dr. Hugh Thompson.

Aerotitis and Use of Radium in Nasopharynx —Dr. John Mikell.

An Analysis of 6000 Cases of Rheumatic Fever—Dr. Carl Stephens, Jr.

Health in the Aleutians—Dr. W. G. Ure.

Combat Neurosis—Dr. C. N. Sarlin.

Infectious Hepatitis—Dr. Stuart Sanger.

Coccidiodomycosis—Dr. Harry Thompson.

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McNary

Herbst, Kenneth A.
McNary

Salsbury, C. G.
Ganado
(associate member)

Spining, W. D.
Ganado
(associate member)

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Alessi, N. V.
Douglas

Atonna, Guy B.
Douglas

Duncan, A. K.
Douglas

Helm, Hugh M.
Douglas

Hess, George H.
Bisbee

Hesser, J. M.
Benson

Nugent, A. G.
Douglas

Parrish, Fred W.
Bowie

Piepergerdes, C. C.
Bisbee

Rice, Hal W.
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Royce, Emery
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Bisbee

Welbourn, M. A.
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Wilson, John C.
Willcox

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Tombstone

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of Health, Phoenix

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Burgess, M. E.
Miami

Cron, Cyril M.
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Gunter, Clarence
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Safford

Stratton, J. Newton
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Chandler

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15 E. Monroe
Phoenix

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Phoenix

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Gilbert

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Winslow

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1800 E. Speedway
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123 S. Stone
Tucson

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130 S. Scott
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129 S. Scott
Tucson

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110 S. Scott
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R. F. D. 66 E
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521 E. 3rd St.
Tucson

Faris, Hervey S.
115 S. Stone
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24 W. Forsythe
Jacksonville, Fla.

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Tucson

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110 S. Scott
Tucson

Gore, Victor M.
123 S. Stone
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4 E. Congress
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Grauman, S. J.
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Gregg, Fred C.
41 E. Jackson
Tucson

Hartman, George O.
115 So. Stone
Tucson

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1811 E. Speedway
Tucson

Hausmann, Richard K.
110 S. Stone
Tucson

Hayden, Edward M.
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Hayhurst, Darrell E.
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Tucson

Holbrook
4 E. Congress
Tucson

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Court House
Tucson

Hyman, Mayer
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Tucson

Lamb, Harold L.
80 S. Stone
Tucson

Lee, Joseph G.
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Tucson

Lemmle, Malwna T.
Medical Center
Tucson

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123 S. Stone
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Tucson

Lindberg, A. L.
23 E. Ochoa
Tucson

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Tucson

Mahoney, Vernon L.
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2421 E. Drachman
Tucson

Manning, W. R.
45 E. Jackson
Tucson

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123 S. Stone
Tucson

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San Xavier Mission
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1811 E. Speedway
Tucson

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134 S. Congress
Tucson

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123 S. Stone
Tucson

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4 E. Congress
Tucson

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130 S. Scott
Tucson

Patterson, C. E.
123 S. Stone
Tucson

Present, Arthur J.
115 S. Stone
Tucson

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130 S. Scott
Tucson

Purcell, Geo. W.
109 S. Scott
Tucson

Rudolph, Royal W.
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Tucson

Sanger, Stuart
123 S. Stone
Tucson

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123 S. Stone
Tucson

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Sickler, Jas. R.
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Tucson

Schutzbank, F. B.
4609 E. Cooper
Tucson

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1800 E. Speedway
Tucson

Shultz, William G.
4 E. Congress
Tucson

Smelker, V. A.
4 E. Congress
Tucson

Smith, R. K.
4 E. Congress
Tucson

Starns, C. E.
123 S. Stone
Tucson

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Tucson

Storts, Brick P.
1811 E. Speedway
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Tappan, Vivian
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130 S. Scott
Tucson

Thomas, Naugle K.
130 S. Scott
Tucson

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168 W. Broadway
Tucson

Thompson, Harry E.
123 S. Stone
Tucson

Thompson, Hugh C. Jr.
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311 E. Congress
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Ure, William G.
2440 E. 6th
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Watkins, Evelyn G.
4 E. Congress
Tucson

Watson, Samuel H.
110 S. Scott
Tucson

Walsh, James M.
County Hospital
Tucson

Wayne, Chas. M.
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Tucson

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Tucson

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4 E. Congress
Tucson

Zemsky, Boris
4 E. Congress
Tucson

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Casa Grande

Maxwell, G. E.
Coolidge

Nevins, Charles R.
Casa Grande

Nevins, Roscoe
Eloy

O'Neil, James T.
Coolidge

Ong, John R.
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Steward, Bernice L.
Florence

Steward, Gus B.
Coolidge

Swackhamer, C. R.
Superior

Tucker, W. P.
Florence

Utzinger, O. E.
Ray

Walker, Glen H.
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Houle, Emile C.
Nogales

Harker, Glen L.
Nogales

Smith, Chaarles S.
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Jerome

Looney, R. N.
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Prescott

Yount, Florence B.
Prescott

Yount, C. E.
Prescott

Yount, C. E. Jr.
Prescott

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Yuma

Corliss, Philip G.
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Fenderson, Wayne A.
Yuma

Knotts, Roy R.
Yuma

Phillips, William A.
Yuma

Podolsky, Abe I.
Yuma

Powell, Charles S.
Yuma

Rider, Robert E.
Yuma

Stanley, John F.
Yuma

Taylor, J. T. T.
Yuma

Woman's Auxiliary

to the

ARIZONA STATE MEDICAL ASSOCIATION

OFFICERS — 1946-47

President — Mrs. Hervey Faris	Tucson
President-elect — Mrs. Harry Southworth	Prescott
Vice President — Mrs. Thomas H. Bate	Tucson
Vice President — Mrs. Joy A. Omer	Tucson
Recording Secretary — Mrs. Louis G. Jekel	Phoenix
Corresponding Secretary — Mrs. Charles E. Starns	Tucson
Treasurer — Mrs. Karl Harris	Phoenix

DIRECTORS

Mrs. Edward M. Hayden	Tucson
Mrs. James H. Allen	Prescott
Mrs. Paul Henry Case	Phoenix

COMMITTEE CHAIRMAN

Health — Mrs. C. R. Swackhamer	Superior
Legislative — Mrs. Wm. F. Schoffman	Phoenix
National Board — Mrs. Jessie D. Hamer	Phoenix
Public Relations — Mrs. George L. Dixon	Tucson
Publicity — Mrs. Thomas A. Hartgraves	Phoenix
Bulletin — Mrs. J. L. Donahue	Tucson
Hygeia — Mrs. Ludwig Lindberg	Tucson
Historian — Mrs. George B. Irvine	Tempe

Mrs. Hervey Faris of Tucson, newly elected President of the Woman's Auxiliary to the Arizona State Medical Association has served as President of Riverside County Medical Auxiliary in California, President of the Pima County Medical Auxiliary, has held offices in the American Association of University Women, Daughters of the American Revolution and Parent-Teacher Association.

1945-46

Report of the President

of the

Woman's Auxiliary to the Arizona State Medical Association

I appreciate the help I have received this year through the "Handbook", the Bulletin of the

Woman's Auxiliary to the American Medical Association, and "Arizona Medicine", Journal of the Arizona State Medical Association.

I express my appreciation to Mrs. Kitty Ives Coleman, executive lay secretary of the Arizona State Medical Association, for her invaluable help and cooperation in regard to the many problems which have arisen during my term of office. And, especially, I deeply appreciate the help and guidance of our national president-elect, Mrs. Jesse D. Hamer.

Two official board meetings of elected officers and committee chairman were called this year. Other business has been attended to by phone and correspondence.

I regret that this year the new Handbooks were not available for our officers. They are of invaluable help.

The Bulletin is of great importance to us both as officers and members. This value has been stressed to all officers, both county and state, as well as to the individual members. I am pleased to report a gain in Bulletin subscriptions for 1945-46.

Through exceptional effort on the part of our state and county Hygeia chairmen an outstanding increase in Hygeia subscriptions has been obtained this year, and I am pleased to report that as a state we exceeded our quota in the national contest.

I am very grateful to the County Auxiliaries. They have carried out the year's program in a splendid manner. Since you will hear the reports that follow, I will say no more. These reports emphasize the splendid work done this year. Outstanding work this year has been done in Cancer, Legislation, and Juvenile Delinquency.

My thanks to Mrs. William F. Schoffman and her committee chairmen for their work on this convention. I know you also will appreciate and enjoy their plans for our entertainment and pleasure.

My thanks to my board of officers, committee chairmen and each of their workers and every member of the Auxiliary who have helped me carry out a most enjoyable year.

Respectfully submitted,

(Signed) Martha Case
Mrs. Paul Henry Case,
President

1936-46
Report of the State Historian of the Woman's Auxiliary to the Arizona State Medical Association

PAST PRESIDENTS

1930 - Mrs. O. H. Brown	Phoenix
1931 - Mrs. C. A. Thomas	Tucson
1932 - Mrs. Fred Holmes	Phoenix
1933 - Mrs. C. R. Swackhamer	Superior
1934 - Mrs. J. M. Greer	Phoenix
1935 - Mrs. C. M. Comer	Tucson
1936 - Mrs. J. M. Meason	Chandler
1937 - Mrs. C. E. Patterson	Tucson
1938 - Mrs. George Truman	Mesa
1939 - Mrs. V. C. Presson	Tucson
1940 - Mrs. J. D. Hamer	Phoenix
1941 - Mrs. B. B. Edwards	Tucson
1942 - Mrs. H. P. Mills	Phoenix
1943 - Mrs. E. M. Hayden	Tucson
1944 - Mrs. J. H. Allen	Prescott
1945 - Mrs. P. H. Case	Phoenix

In order to compile the state history, it was necessary to read all of the reports and publicity for the past sixteen years. This was done by the President, Mrs. Paul Henry Case; the Corresponding Secretary, Mrs. James R. Moore and myself. We found the following the most outstanding achievements in the history of the Auxiliary.

In 1930, the Auxiliary was organized to act as hostesses for the State Convention.

In 1933, committees to work on public health projects, public relations and legislative matters were organized and a program launched to see that the health magazine "Hygeia" was in the hands of all the schools in the state of Arizona.

In 1936, the state organization received national recognition for the amount of "Hygeia" subscriptions placed in the state of Arizona.

In 1941, a War Service Committee was inaugurated and a committee on legislation inaugurated also.

In 1942, the State Auxiliary undertook an extensive health program and the Kenny Pack Woolen Drive was started in connection with an educational program for the National Infantile Paralysis Association and stress was brought on mental hygiene.

In 1943, the Cancer Project was begun and national recognition was given the Auxiliary for the services rendered the American Cancer Society.

In 1944, the State Auxiliary continued with the Cancer Project and again recognition was

given the Woman's Auxiliary for outstanding services rendered.

The achievements prove that contrary to the general opinion that the Woman's Auxiliary was created primarily for social activities. The main objective for the existance of this organization is to aid in health education, juvenile delinquency, and any other major problem dealing with health. The reason for the concentrated effort on the part of the Medical Auxiliary on health and juvenile delinquency is that physicians feel we cannot have healthy minds without healthy bodies.

All major health agencies have received aid through this organization through the direction of the Past Presidents.

Respectfully submitted,

Mrs. Geo. B. Irvine
State Historian

Report of the Woman's Auxiliary to the Maricopa County Medical Society 1945-46

Called Board Meetings

Five board meetings were called during the year for the purpose of planning the entire program of activity, for arranging social events and to promote health education.

Regular Meetings

The first Monday of each month beginning in October and ending with Annual meeting in May is the time set aside for our meetings. All of these meetings are in the evenings with the exception of the Annual Meeting and are followed by a social hour shared with our husbands following their meetings. The time has been divided between current business and educational programs dealing with Juvenile Problems, Tuberculosis Control, Cancer Control, Rehabilitation, Legislation and Community Chest needs.

Public Relations

December—Workers sent to aid with sale of Xmas Seals for Arizona Anti-Tuberculosis Association.

January — Mrs. L. Clark McVay was appointed to act as our representative on the Social Action Committee of the Arizona Conference of Social Workers. Our interest being the development of a Children's Colony here. This group will have a State Convention April 25, 26, 27, so that we can expect no report until the May meeting.

February — Ten workers supplied to help with the Community Mass X-ray Project in the interest of Tuberculosis Control for a two week period, Feb. 4th to Feb. 15th.

April — Four women each day volunteered to work for the American Cancer Society in an effort to raise funds, for a one week period.

War-Service — Snak-Bar — Members acted as hostesses on Wednesday each week from 1 P.M. to 4 P.M. This work was a continuation from last year until we were asked to change our time until later in the day and since the women found this impossible we gave up this activity, about the first of the year.

Red Cross — Many knitted squares were turned in as evidence of individual work within the group.

Community Council — For the first time this group was represented in this civic body. $2.00 dues were paid and our Public Relations Chairman attended meetings in our behalf.

Hygeia

An enthusiastic chairman who believed in frequent personal contacts sent our subscriptions to 105 in number this year, many gifts to schools being included in this total. Last year we had around 10 subscriptions sent in.

Money Making Projects

October — Under the chairmanship of Mrs. S. R. Caniglia, we had a Rummage Sale on which we realized $233.70.

Press and Publicity

All meetings reported to local papers and in turn given to the state press and publicity chairman. A very interesting scrap book was kept of all articles pertaining to County doctors and their families.

Additional Accomplishments

1. Complete revision of by-laws.

2. Work by the membership chairman, Mrs. Barfoot to increase membership. Some 45 let-

ters or phone calls were made with an increase of 26 members.

3. First Year Book printed.

4. In the interest of public health letters were sent to Legislators, Governor Osborn, OPA Representatives both local and national, Chester Bowles, who is Economic Stabilization Director and Arizona Milk Producers Association in an effort to terminate the milk strike suffered here in February.

5. A booklet of the new by-laws is being printed at this time for distribution among the members.

6. At the Annual meeting Honorary Membership will be conferred on 16 eligible persons.

7. In May we will be hostesses for the State Medical Convention held in Phoenix on the 2nd and 3rd of May.

Philanthropic

November	$25.00	Community Chest
February	$10.00	March of Dimes
April	$25.00	Red Cross
April	$75.00	Crippled Children's Society
April	$75.00	Arizona Division, American Cancer Society

Accounting of Moneys

May '45	$165.30	Balance turned to Treasurer
	$ 58.00	Collected dues in arrears
October	$233.70	Rummage Sale
March	$232.00	Current dues for 116 members
March	$ 24.75	Paid out for nite letters (milk)
April	$403.78	Balance one month early

Social Events

September - Luncheon - Hotel Adams
December - Annual Dinner Dance - First since Pearl Harbor
March - St. Patrick's Tea - Courtesy of Board
May 3rd - Luncheon - Paradise Inn - Convention
May 3rd - Dinner - Westward Ho - Convention

My very grateful thanks to a diligent and faithful Board of Directors who have made this an interesting year for officers and members alike. With best wishes to our successors.

Respectfully submitted,

Mrs. Wm. F. Schoffman
President
Maricopa County Auxiliary

Woman's Auxiliary to the Maricopa County Medical Society

OFFICERS — 1946-47

President — Mrs. George Enfield ..... Phoenix
President-elect — Mrs. Joseph Bank ..... Phoenix
First Vice President — Mrs. Charles W. Sult ..... Phoenix
Second Vice President — Mrs. E. Henry Running ..... Phoenix
Recording Secretary — Mrs. R. W. Hussong ..... Phoenix
Treasurer — Mrs. A. E. Cruthirds ..... Phoenix
Advisor for one year — Mrs. Benjamin Herzberg ..... Phoenix
Advisor for two years — Mrs. Paul H. Case ..... Phoenix
Corresponding Secretary — Mrs. Robert T. Phillips ..... Phoenix

COMMITTEE CHAIRMAN

Bulletin — Mrs. Frank Edel
Health — Mrs. Lloyd K. Swasey
Courtesy — Mrs. Virgil A. Toland
Historian — Mrs. George B. Irvine
Hostess — Mrs. Howell Randolph
Hygeia — Mrs. Wesley G. Forster
Legislative — Mrs. Wm. P. Schoffman
Organization and Membership — Mrs. Charles W. Sult
Parliamentarian — Mrs. Joe E. Greer
Press and Publicity — Mrs. Matthew S. Cohen
Program — Mrs. E. Henry Running
Public Relations — Mrs. James R. Moore
Revisions — Mrs. Karl S. Harris
Telephone — Mrs. Donald G. Carlson
Post War Planning — Mrs. Thomas H. Bate
Advisory Council — Dr. Leslie B. Smith
Dr. Thomas W. Woodman
Dr. Ronald S. Haines

HONORARY MEMBERS

MARICOPA COUNTY AUXILIARY

Mrs. Harry Carson — 76 West Vernon — Phoenix
Mrs. R. W. Craig — 516 West Vernon — Phoenix
Mrs. F. C. Jordan — 22 West Cambridge — Phoenix
Mrs. H. P. Mills — 133 West Granada — Phoenix
Mrs. W. S. Sharp — 238 North MacDonald — Mesa
Mrs. John L. Hagan — 346 West Lewis — Phoenix
Mrs. Hylda Browning — 24 West Holly — Phoenix
Mrs. M. K. Vivian — 3317 North Central — Phoenix
Mrs. H. K. Beauchamp — 802 North 4th Ave. — Phoenix
Mrs. A. A. Shelley — 516 E. Portland — Phoenix
Mrs. George C. Rubel — 109 Sunland Ave. — Buckeye
Mrs. Ancil Martin — 808 North 2nd Ave. — Phoenix
Mrs. Victor Randolph — 125 East Coronada — Phoenix
Mrs. Logan D. Dameron, Sr. — 512 West McKinley — Phoenix
Mrs. Verna Sweek — 121 East Willeta — Phoenix
Mrs. L. H. Thayer — Route 1, Box 399 — Mesa
Mrs. Wayne Fountain — 89 E. Columbus — Phoenix

Pima County Medical Auxiliary President's Report 1945 - 1946

The year 1945-46 was opened at the May meeting in the home of Mrs. R. E. Guenter at the Veteran's Hospital, on May 8, 1945. A social meeting was the order of the evening with the new officers presiding. The Officers were Mrs. C. S. Linton, President; Mrs. Lewis H. Howard, President-elect; Mrs. Wm. R. Lyons, Vice-president; Mrs. Wm. D. Carrell, Second Vive-president; Mrs. Chas. R. Starns, Recording Secretary; Mrs. Raymond T. Oyler, Corresponding Secretary and Mrs. Richard K. Hausmann, Treasurer.

The October meeting was held at the home of Mrs. B. B. Edwards, October 9, 1945. After the routine reports, Mrs. Richard Bishop Moore, whose husband is in the research on radium, talked. She reviewed a book on the Curies and interspersed her report with many interesting and personal stories about the Curies. This tied in with the work on Cancer and a committee was appointed with Mrs. Dan Mahoney as chairman to consider what the Medical Auxiliary

could do to help in this work. The project had been taken over by the Tucson Woman's Club and they were making all the dressings needed in the city. The Philanthropic committee with Mrs. McKnight as Chairman, were appointed that we might decide were we were the most needed.

The November meeting was held at the YWCA with Judge DeConcini talking to us about child delinquency. The report of the philanthropic committee was given. It was decided to work for Holland Relief making shoes and knitting.

The December meeting was also held at the YWCA with Mrs. Lyons presiding.

The January meeting was held at the home of Mrs. Edward Hayden. Reports of the standing committees were given. It was voted to subscribe for copies of the Hygeia to put in the various outlying schools. Several pairs of slippers and a sweater were given to Mrs. McKnight.

The February meeting was also held at the YWCA with Dr. H. D. Cogswell talking to us about the children of the occupied countries. He gave a very interesting and inspiring talk.

The March meeting was held at the home of Mrs. Charles E. Patterson. The report of the nominating committee was presented and accepted. As there were no other nominations, the following slate was elected for the coming year. As Mrs. Howard resigned as President-elect, Mrs. Charles Starns was elected to the post for the year 1947-48 and Mrs. Woodard was elected president for the year 1946-47. The other officers elected were Mrs. E. J. Gotthelf, Vice-president; Mrs. Arthur Present, Recording Secretary; Mrs. Donald Lewis, Corresponding Secretary; Mrs. Harold Kosanke, Treasurer. The meeting was then turned over to the Social Committee as the wives of returned veterans were the guests of honor.

The April meeting was held March 28, 1946 at the Old Adobe Patio. We had a luncheon to launch the Cancer Drive. About eighty members were present. There were several guests. Speakers for the occasion were Dr. Ludwig Lindberg, Mr. Ritter, who is in charge of the publicity, and Mrs. Arthur Patton who is giving all her time to the drive. It was arranged to distribute boxes for contributions and to man a booth.

The year has been moderately successful.

Respectfully submitted,
Clarissa C. Linton (Mrs. C. S.)
President, 1945-46.

Yearly Report of the Auxiliary to the Yavapai County Medical Society 1945-1946

Our Auxiliary has a membership of twenty-one members. During the war years we have met every second month and have had very pleasurable and instructive programs at our meetings consisting of book-reviews, motion pictures, talks on the life and language of the Chinese people given by a doctor and his wife who had spent many years in that country and also discussions of our various projects.

One of our nicest meetings was made so by having Mrs. Hamer, our National President-elect, speak to us concerning the national work of our organization.

During this past year we have also been happy to welcome all our doctors and their families back from service.

Our members have been very faithful in helping with the Red Cross work in our county. Also we voted to sponsor the work of the Teenagers groups in Prescott and are in readiness to help them when called upon.

As an Auxiliary group we sent in eighteen dollars to the Cancer Control Society last year.

Respectfully submitted,
Mrs. H. A. Hough (Signed)

THE SCHOOL CHILD'S BREAKFAST

Many a child is scolded for dullness when he should be treated for undernourishment. In hundreds of homes a "continental" breakfast of a roll and coffee is the rule. If, day after day, a child breaks the night's fast of twelve hours on this scant fare, small wonder that he is listless, nervous, or stupid at school. A happy solution to the problem is Pablum. Pablum furnishes protective factors especially needed by the school child—especially calcium, iron and the vitamin B complex. The ease with which Pablum (or Pabena) can be prepared enlists the mother's cooperation in serving a nutritious breakfast. This palatable cereal requires no further cooking and can be prepared simply by adding milk or water of any desired temperature.

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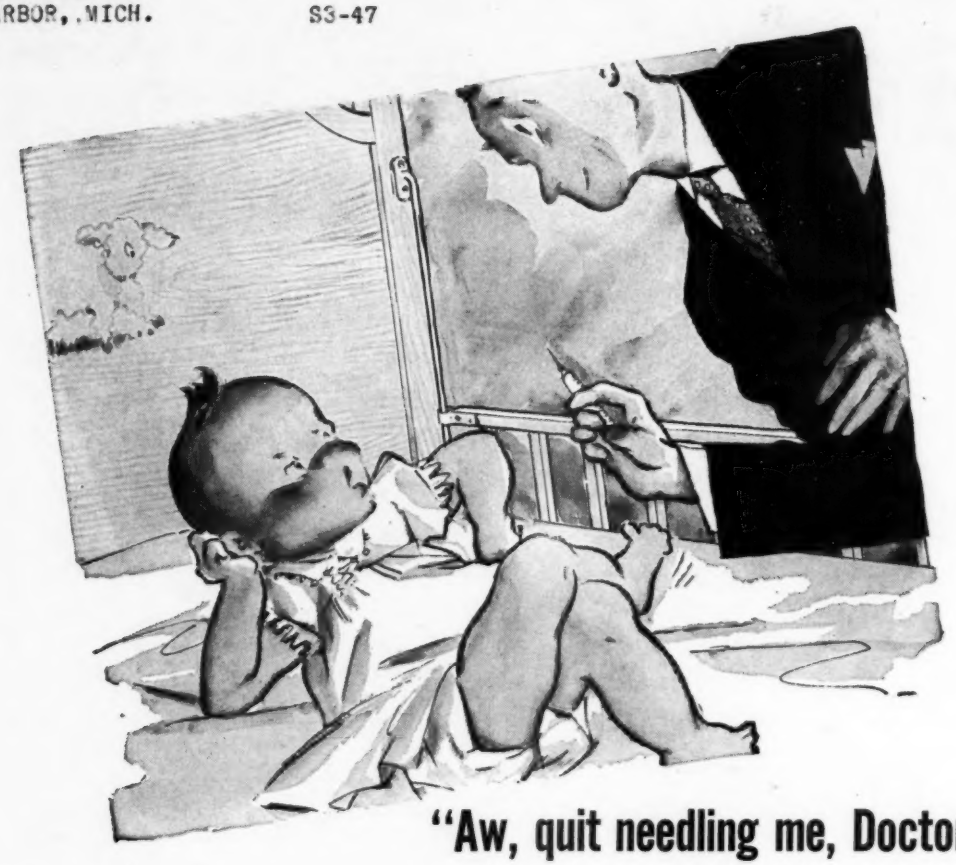

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Cutter D-P-T (Alhydrox)—in contrast to alum precipitated vaccines—presents less pain on injection, and avoids almost entirely both persistent nodules and sterile abscesses. You, and your patients, will appreciate its many advantages.

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10 cc., 4 immunizations	$5.00	10 cc., 5 immunizations	$6.25

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